

Behavioral Risk Factor Surveillance System

New York State 1991 Summary Report

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The Centers for Disease Control and Prevention (CDC) provide funding and technical assistance to the Behavioral Risk Factor Surveillance System (BRFSS) which was introduced in New York State in 1983 and has been conducted annually since 1985. Standardized questions developed by CDC are administered via a telephone survey. The 1991 BRFSS was conducted in forty-seven states plus the District of Columbia. This survey provides state-specific prevalence estimates of diseases and preventable behaviors attributable to early morbidity and mortality. These data are used to plan and promote health programs, support legislative decisions, and assess health-related behaviors.

The Behavioral Risk Factor Surveillance System - Summary Report is published quarterly. Issues will contain brief summaries on the risk factors included in each year's survey. Occasionally, issues will summarize special surveys, analysis of trends, and more in-depth discussion of specific risk topics. Copies may be obtained by contacting:

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NEW YORK STATE DEPARTMENT OF HEALTH

Methodology*

The BRFSS administers a telephone survey to a sample of New York State residents 18 years and older. Respondents are selected randomly from all New York State residents with telephones, using a probability sampling method. We use a multistage cluster design procedure based on the Waksberg Random Digit Dialing Technique. After a household has been contacted, the respondent is randomly selected from those adults residing in the household. The survey is administered by trained interviewers using a Computer-Assisted Telephone Interviewing (CATI) system. This system improves data quality by allowing direct entry of responses on a computer file and controls the logical flow of the interview. Interviews are conducted primarily during weekday evenings and on weekends during two weeks every month according to an interviewing schedule designated by CDC.

Definitions

The following definitions are provided to better understand the BRFSS summary articles:

- **Sample Size:** the number of individuals who responded to the specific BRFSS question. The total sample participating in the 1991 BRFSS was 1923 respondents.

- **Prevalence:** the number of people reporting a given risk behavior divided by the sample of people asked the question, weighted to estimate the prevalence in the population. Reported prevalence ratios are weighted according to the probability of selection of the household and respondent, as well as the 1990 census population for age, race and sex.

- **Standard Error (SE):** a measure of the amount of variability that exists in the calculation of the prevalence estimate.

- **Confidence Interval (CI):** since these data were collected from a sample of the New York State population, some variation or imprecision is associated with each estimate. The 95% confidence interval is a range which contains the true population prevalence estimate 95% of the time, if repeated sampling of the population is performed.

- **Estimated 95% Confidence Intervals:** used as a conservative measure when exact confidence intervals are not available. The variance for each prevalence ratio was determined by multiplying the SE by 1.5. The estimated SE was then used to calculate the CI.

- **Response Rate:** the response rate is the number of completed interviews divided by the number of processed interviews. Processed interviews include completed interviews, refusals, and incomplete interviews. The response rate for 1991 BRFSS survey was 79%.

Limitations

Some important limitations to remember when interpreting the BRFSS data are:

- telephone surveys are generally not as effective as face-to-face interviews;
- These data are **self reported** and not based on actual examination or measurement; the validity of survey data may be affected by the respondent not answering honestly, not accurately recalling information, or not understanding the question;

- Since households must have a telephone to be considered, some population groups may be under-represented (for example, lower income groups); and

- when the data are classified by sociodemographic categories such as age, race, sex, marital status, education and income level, the sample sizes are smaller. Consequently, the cell sizes may be too small to make inferences to the general population.

*This information is included in the first report for each annual series.

Hypertension

Brian D. Fisher, PhD (Bureau of Adult and Gerontological Health)

Introduction

The National Heart, Lung, and Blood Institute (NHLBI) has recently emphasized the importance of both diastolic and systolic pressure in the diagnosis of hypertension. Although both systolic and diastolic pressure have always been used, diastolic pressure was thought to be the more important of the two. It is now known that systolic pressure is as important in predicting heart disease as diastolic pressure. NHLBI advocates using a reading greater than or equal to 140 mmHg for systolic or 90 mmHg for diastolic as criteria for hypertension. Along with this new definition, NHLBI has also recommended the use of new terminology for the blood pressure classification scheme: The terms stage 1, stage 2, stage 3, and stage 4 are to replace mild, moderate, severe, and very severe, respectively. NHLBI believes that labeling stage 1 as mild led many people to not take their condition seriously.

Fifty million Americans - one in four adults - have high blood pressure. The prevalence of high blood pressure increases with age, is greater for blacks than for whites, and increases as education decreases. Among people over 60 years of age, 60 percent of non-Hispanic whites, and 71 percent of non-Hispanic blacks are hypertensive. Hypertension is a major risk factor for stroke, heart attack, blindness, and kidney failure. It can also result in pain during walking if leg arteries become clogged with deposits of fat from atherosclerosis. In 1990 alone, 75,710 people died from cerebrovascular disease in New York State.

Nationally, there has been a 50 percent and a 57 percent drop in deaths from heart disease and stroke, respectively, over the past twenty years. NHLBI has suggested this is partly due to the positive influence of hypertension intervention programs. Dr. Edward J. Rocella, a staff member of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure, estimates that between the years of 1970 and 1990, diagnosis and treatment of high blood pressure has prevented approximately 180,000 fatal strokes.¹

The strong association between hypertension and heart disease suggests the need for a national preventive program. One defense of such a program is based on evidence that development of complications from high blood pressure may begin while blood pressure is still in the normal range. NHLBI recommends that a prevention program target both the general population and focus on known populations prone to hypertension.²

The analysis that follows considers the extent to which New York State citizens are being screened for hypertension. It then presents the level of hypertension awareness in New York State.

Results

Table 1 presents the percentages, for the total population and for various demographic groups, that have had their blood pressure checked within the past year. The results suggest that almost 95% of the adult population have been checked recently. This rate was constant across various demographic factors.

Table 2 presents the proportion of respondents who have been told by a health professional they have high blood pressure. Nearly twenty-two percent of the adult population reported that a health professional has informed them that their blood pressure is high. Women (22.9%) and men (19.9%) reported very similar proportions. The data also show an increased occurrence of high blood pressure with age. Furthermore, the proportion of increase accelerates with age. For the 65 and over and the 55-64 age group, the percent with elevated blood pressure was 44.0 and 32.3 percent, respectively. In contrast, the proportion of hypertensives in ages 18-24 was 7.1 percent, and in ages 25-34 was 10.0 percent. The proportions for non-Hispanic whites and other races were comparable (21.0% and 22.8%, respectively). Adults with less than a high school education have the greatest risk of being hypertensive, but because of the large standard error in measurement, the differences between educational groups are not significant. This pattern holds true for income groups.

Table 1
BRFSS, 1991, Adults reporting having
a blood pressure reading in the past year

Sociodemographic Characteristic	Weighted Percent	Est. 95% CI (+/-)
Total	93.9	2
Sex		
Male	92.4	3
Female	95.2	2
Age		
18-24	93.3	5
25-34	92.6	3
35-44	89.7	5
45-54	97.0	3
55-64	96.7	4
65+	96.3	3
Race/Ethnicity		
White	96.4	2
Non-White	92.6	4
Education		
<High school	97.6	3
High School graduate	92.9	5
Some College	92.5	3
College graduate	93.1	4
Marital Status		
Married	93.1	3
Sep/Div/Wid	97.1	2
Never Married	93.3	4
Income		
<\$15,000	95.9	3
\$15,000-\$24,999	92.9	4
\$25,000-\$34,999	96.2	4
\$35,000+	91.8	4
Region		
New York City	93.7	2
Rest of State	95.7	4

Table 2
BRFSS, 1991, Adults reporting a health professional
informed them they were hypertensive

Sociodemographic Characteristic		Weighted Percent	Est. 95% CI (+/-)
Total		21.5	6
Sex	Male	19.9	9
	Female	22.9	8
Age	18-24	7.1	19
	25-34	10.0	13
	35-44	15.8	14
	45-54	23.5	16
	55-64	32.3	15
	65+	44.0	12
Race/Ethnicity	White	21.0	7
	Non-White	22.8	11
Education	<High school	31.6	13
	High School graduate	21.3	10
	Some College	14.7	13
	College graduate	21.0	11
Marital Status	Married	19.5	9
	Sep/Div/Wid	37.2	11
	Never Married	14.3	12
Income	<\$15,000	32.2	12
	\$15,000-\$24,999	21.0	14
	\$25,000-\$34,999	23.9	18
	\$35,000+	17.5	12
Region	New York City	21.7	25
	Rest of State	22.9	26

Adults making less than \$15,000 a year have a prevalence proportion almost 12 percent higher than any other income group; this higher level was not significantly different than for respondents with lower incomes. Finally, there was not a substantial difference between New York City (21.7%) and the rest of New York (22.9%) in the proportion told they were hypertensive.

Discussion and Recommendations

These results suggest that intervention efforts in New York have been successful in at least informing the population of their blood pressure status. The vast majority of the adult population has had a blood pressure check in the past year. This is the important first step in addressing the problem of hypertension in New York. However, the estimated prevalence proportion shows that a large portion of the population is not controlling their blood pressure after receiving this information. Furthermore, the data suggest that this proportion remains high over many demographic groups. This supports NHLBI's recommendation for a preventative program targeting the entire population, supplemented by an effort to target specific high risk groups. This program should concentrate on proven modifiable lifestyle factors that are associated with hypertension. Such lifestyle modifications would include: tobacco avoidance, weight reduction, moderation of alcohol intake, increasing physical activity, modification of diet, and alleviation from stressful life events. Public health efforts need to consider ways of cultivating positive health attitudes in the population at large, and fostering more opportunities to live a healthy lifestyle. Special targeted populations should include the poor, elderly, and those with less education.

References

- ¹ "U.S. seeks attack on hypertension." The New York Times. October 31, 1992.
- ² The Fifth Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure (JNC V). U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, 1992.

Overweight and Weight Control Practices

Thomas A. Melnik, DrPH (Division of Nutrition), Deborah A. Spicer, RD, MPH (Division of Nutrition) and Kathleen R. Head, BS (Division of Nutrition)

Introduction

An estimated 34 million adults age 20-74 in the United States are overweight.¹ The total economic cost of obesity in the United States was estimated at \$39.3 billion in 1986, representing 5.5% of the total cost of illness.² This condition places individuals at increased risk for morbidity from heart disease, some types of cancer, diabetes, hypertension, and digestive diseases.³ A number of studies have examined the effects of body weight on mortality. Most have demonstrated that mortality rises with increasing weight and experts generally agree that excessive body weight is associated with higher mortality.⁴ Because of the health consequences of overweight, the Healthy People 2000 objective for the nation is to reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older.⁵

The 1991 BRFSS included questions regarding weight status and weight control practices. Respondents reported their height and weight without shoes. The body mass index (BMI), defined as body weight in kilograms divided by the square of the height in meters (wt/ht²), was used as the indicator of weight status. Overweight was defined as a BMI > 27.8 for men and > 27.3 for women. These values represent the sex-specific 85th percentile of BMI for adults in the United States aged 20-29 years, estimated from the Second National Health and Nutrition Examination Survey.¹ Respondents were also asked if they were making attempts to lose weight. Those who reported trying to lose weight were asked if they were eating fewer calories or increasing physical activity.

Results

The findings from the 1991 BRFSS showed 24.2 percent of the adults in New York State were overweight (Table 1). This represents a relatively sharp increase in the prevalence of overweight since the 1990 BRFSS when it was estimated to be 20.0 percent. Those most likely to be overweight included males (26.7%), those aged 45-54 (32.0%), black non-Hispanics (37.7%), those with less than a high school education (36.1%), and those with incomes less than \$15,000 per year (31.1%). Compared to other states participating in the 1991 survey, the prevalence of overweight in New York State ranked near the middle. The median prevalence of overweight for all 48 reporting states was 23.4 percent with a range of 17.8 - 28.7 percent.

More than one-third of all adults (37.2%) in New York State and 64.2 percent of those who were overweight reported trying to lose weight in 1991. Those most likely to report trying to lose weight were females (43.3%), those aged 45-54 (46.8%), Hispanics (41.0%), and those with incomes greater than \$50,000 per year (46.6%). Of those trying to lose weight, 78.4 percent reported eating fewer calories and 46.9 percent had increased their physical activity. Just 37.1 percent were attempting to lose weight using the recommended combination of decreasing calories and increasing physical activity. Twelve percent reported attempting to lose weight, but were neither decreasing calories nor increasing physical activity (Figure 1).

Discussion and Recommendations

The findings for the 1991 BRFSS raise concern about overweight in New York State. The statewide prevalence of overweight has

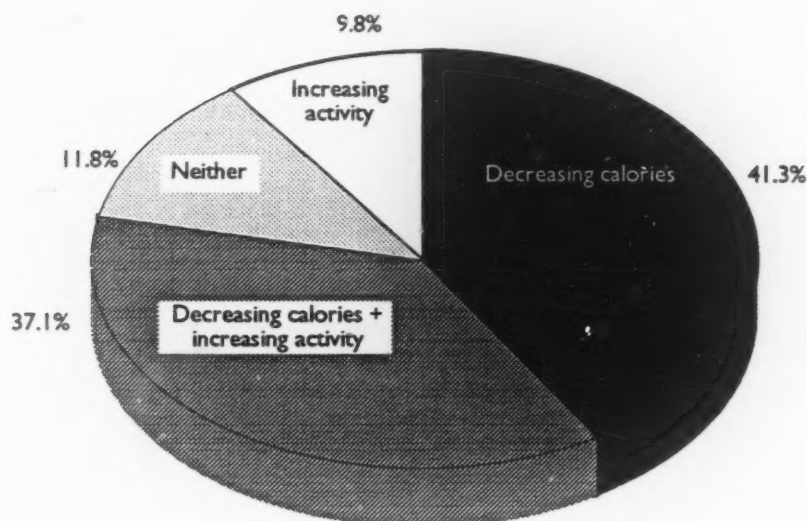
Table 1
BRFSS, 1991, Adults who were found
to be overweight based on BMI

Sociodemographic Characteristic		Weighted Percent	Est. 95% CI (+/-)
Total		24.2	1.9
Sex	Male	26.7	3.0
	Female	21.9	2.4
Age	18-24	12.5	4.3
	25-34	21.5	3.8
	35-44	24.0	4.3
	45-54	32.0	5.9
	55-64	30.9	5.9
	65+	27.5	4.7
Race	White (non-Hispanic)	23.0	2.2
	Black (non-Hispanic)	37.7	6.1
	Hispanic	24.0	6.1
	Other	10.4	6.8
Education	<High School	36.1	5.6
	High School Graduate	25.0	3.4
	Some College	24.8	4.2
	College Graduate	17.1	3.0
Marital Status	Married	24.6	2.7
	Sep/Div/Wid	29.9	4.1
	Never Married	18.9	3.5
Income	< \$15,000	31.1	4.7
	\$15,000-\$24,999	25.3	4.7
	\$25,000-\$34,999	25.6	5.8
	\$35,000+	23.1	3.8

increased by 4.1 percent since the 1990 survey, with estimated prevalence of overweight in 1991 exceeding 30 percent in some population subgroups, including black non-Hispanics and those in the low socioeconomic status. Also of concern is the fact that only 47 percent of those trying to lose weight were doing so by increasing their physical activity, and only 37 percent were using what is believed to be the most effective approach — a combination of reduced calorie intake and increased physical activity. Some of the respondents (12%) who were attempting to lose weight were neither decreasing calories nor increasing activity, suggesting that other, less desirable or unhealthful, forms of weight control are being practiced. Finally, the percentage of those trying to lose weight exceeded the percentage of those overweight, indicating the possibility some residents are inappropriately trying to lose weight.

These findings point to the need to redouble efforts to prevent overweight and to meet the Healthy People 2000 objective of 20 percent overweight statewide. Because of the difficulty in losing weight and maintaining weight loss, prevention of overweight to begin with should be a major public health initiative, particularly among young adults. Weight loss efforts should stress a combination

Figure 1
Weight control practices of those trying to lose weight



of decreasing caloric intake and increasing physical activity. Those trying to achieve or maintain an appropriate weight would benefit greatly by efforts to change the environment to ensure that low-fat, low-calorie food choices are widely available and to enhance opportunities for physical activity.

References

¹ National Center for Health Statistics. Anthropometric reference data and prevalence of overweight, United States 1976-80. Hyattsville, MD: US Department of Health and Human Services, Public Health Services, 1987; DHHS publication no. (PHS) 87-1688.

² Colditz, Graham A. Economic costs of obesity. *American Journal of Clinical Nutrition* 1992; 55:503S-7S.

³ Office on Smoking and Health. The Surgeon General's report on nutrition and health. Washington, DC: US Department of Health and Human Services, Public Health Service, 1988; DHHS publication no. (PHS) 88-50210:275-309.

⁴ National Institutes of Health Consensus Development Panel on the Health Implications of Obesity. Health implications of obesity: National Institutes of Health consensus development conference statement. *Ann Intern Med* 1985;103(6, pt 2):1073-7.

⁵ Healthy People 2000: National Health Promotion and Disease Objectives, Washington, D.C.: U.S. Department of Health and Human Services; 1990. Public Health Service Publication No. (PHS) 91-50213.

Physical Activity

Colleen Baker, BS (Bureau of Adult and Gerontological Health)
and Bob Kasprzyk, MPA (Bureau of Adult and Gerontological Health)

Introduction

The level of physical activity is an important factor in the development and management of many chronic diseases. Studies have shown coronary heart disease, non-insulin dependent diabetes mellitus, moderate-to-mild depression, osteoporosis, hypertension and obesity are positively affected by regular physical activity. Sedentary lifestyle behavior is one of the most preventable risk factors of cardiovascular disease. Less active people are approximately twice as likely to die from coronary heart disease as physically active persons.¹ Regular physical activity can enhance a sense of well-being which can lead to healthy behaviors.^{2,3}

Respondents of the BRFSS were asked whether they exercise and, if so, what type of activity, and how often that activity or activities are performed. Individuals were considered sedentary if they reported no physical activity or irregular activity.

Results

The 1991 BRFSS respondents reported the following levels of physical activity:

- 34.2 percent reported **no physical activity**;
- 24.2 percent reported **irregular physical activity** which is defined as those who exercise less than three times per week or less than 20 minutes per session;
- 35.0 percent reported **regular physical activity** meaning that they exercise 20 minutes or more three or more times per week but exercise less than 60 percent of their cardiorespiratory capacity; and
- only 6.6 percent are meeting the **1990 health objective** for the nation (exercising the recommend 60 percent of the individual's cardiovascular capacity, at least 20 minutes three or more times per week).

These results show 58.4 percent of the population are estimated to be sedentary. As shown in Table 1, the prevalence of sedentary lifestyle varied among sociodemographic groups. People 65 and over were significantly more likely to be sedentary than the youngest respondents (70.1% vs. 47.2%). Persons with a high school education (64.4%) or less (71.9%) varied from those with some college/technical schooling (49.8%) and college/technical schooling or greater (51%). Adults who are married or an unmarried couple (66.6%) were more sedentary compared to those never married (49%). Also, those earning \$15,000 or less (64.2%) are more likely to be sedentary than the higher group earning \$35,000 or greater (56.1%).

About two-thirds of respondents (65.7%) reported some level of physical activity. Of those who reported some level of exercise or physical activity, walking was the most popular exercise (42.3%). Figure 1 shows the proportion who engage in walking as an exercise activity by age and sex. Other primary activities or exercises included aerobic classes (8.3%), running and jogging (7.8%), and bicycling (3.6%).

Discussion and Recommendations

In 1988 and 1989 the BRFSS data reported New York State as the most sedentary (75%). The proportions sharply declined in 1990 and 1991 to 63 percent and 58 percent, respectively. The median for all 48 participants was 57 percent. Although these rates look promising, over half of the population continues to practice unhealthy sedentary lifestyle behaviors. With the adoption of increasing physical activity, we can better manage those individuals with chronic diseases.

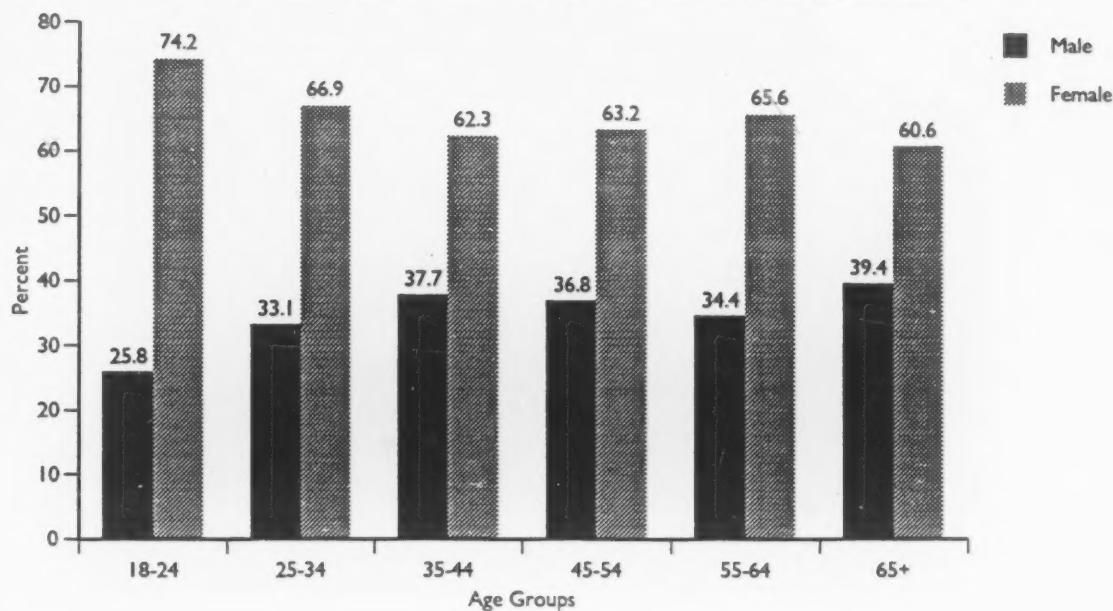
Continued and intensified promotion and support of exercise programs in the workplace, schools, and nursing homes are needed. Targeting education programs to the elderly, the unmarried, lower income and less educated groups could improve the behaviors of these high risk groups.

Table 1
BRFSS, 1991, Adults reporting
sedentary lifestyle behavior*

Sociodemographic Characteristic	Weighted Percent	Est. 95% CI (+/-)
Total	58.4	3.3
Sex	Male	57.2
	Female	59.5
Age	18-24	47.2
	25-34	53.9
	35-44	57.8
	45-54	58.8
	55-64	63.2
	65+	70.1
Race/Ethnicity	White, Non Hispanic	57.0
	Non-White	62.5
Education	<High school	71.9
	High School graduate	64.4
	Some College	49.8
	College graduate	51.0
Marital Status	Married, unmarried couple	59.8
	Sep/Div/Wid	66.6
	Never Married	49.0
Income	<\$15,000	64.2
	\$15,000-\$24,999	66.0
	\$25,000-\$34,999	56.3
	\$35,000+	56.1
Region	New York City	50.6
	Rest of State	56.6

*Sedentary lifestyle is defined as those respondents who did not exercise greater than 3 times per week, or more than 20 minutes a session during the month interviewed.

Figure 1
BRFSS, 1991, Adults who chose walking as a means of exercise or physical activity



References

- ¹ Centers for Disease Control. Coronary heart disease attributable to sedentary lifestyle— Selected states. MMWR 1990;39:541-544.
- ² Centers for Disease Control. The behavioral risk factor surveillance system. Reprints From MMWR January 1988;20-23.
- ³ Centers for Disease Control. Chronic disease and health promotion. Reprints form MMWR, 1985-1989;3:15-18.

Injury Control

Colleen C. McLaughlin, MPH (Injury Control Program/Bureau of Cancer Epidemiology)

Introduction

Injuries are one of the leading causes of death and permanent disability among Americans in all age groups. Injuries disproportionately affect the young and the elderly because of their lack of ability to fully control their environment. Injuries account for more years of potential life lost than any other cause of death, including cancer and heart disease.

Among children, injuries are the number one cause of death and hospitalization. In New York State in 1990, 5,675 children under the age of ten were hospitalized for injuries, and 342 children died. The leading causes of injuries in this age group are falls, motor vehicle crashes, hot substance scalds, and poisonings.

Despite the conventional belief, most injuries are not "accidents." Injuries are common, predictable, and most importantly, preventable.

Results

Overall, the results of the 1991 BRFSS questions concerning injury control revealed that while the majority of respondents reported use of car safety seats for their youngest child, having home smoke detectors and knowledge of poison control center phone numbers, few respondents reported having checked the hot water temperature or having ipecac syrup in the household (Figure 1). In general, the proportion at-risk for injuries was higher among non-white respondents versus white respondents, among respondents residing in New York City versus those living in the remainder of the state, and among households with lower income levels (Table 1).

Smoke Detectors. Overall, 88.8% of respondents reported having a working smoke detector in the household. Slightly lower proportions were reported by respondents who lived in New York City, or were non-white. This is likely an overestimation of the proportion of households which have working smoke detectors

because some respondents might not be aware of whether or not the batteries in their smoke detectors are functional.

Hot Water Temperature. The proportion of respondents who reported that they or someone else in their household had checked the hot water temperature was generally low across all demographic characteristics. While only 6.5% overall had checked the hot water temperature, 9.8% of respondents in households where the youngest child was between the age of 1 and 10 reported having done so. The proportion of respondents age 65 and older who reported having checked their hot water temperature was 9.6%, while the proportion of respondents between the ages of 18 and 64 was only 5.2%.

Poison Control Center *[Asked only in households where youngest child was 10 years or younger].* While 71.5% of all respondents reported having the telephone number to a poison control center, only 52.5% of non-white respondents reported having the appropriate number. Correspondingly low proportions were reported by residents of New York City or those who had incomes of less than \$15,000 per year.

Ipecac Syrup *[Asked only in households where youngest child was 10 years or younger].* The proportion of respondents who reported the presence of ipecac syrup in the household was 32.3%. The proportion reporting having ipecac syrup among non-white respondents was significantly lower than among white respondents (18.6 versus 39.8%).

Child Safety Seats and Seat Belts *[Asked only in households where youngest child was 10 years or younger].* The proportion of respondents who reported that the youngest child in the household was always buckled in a safety seat or seat belt was high for almost all demographic groups. The proportion using safety seats among non-white respondents was slightly lower than among white respondents. As with the other questions concerning injury control, the proportion of individuals at risk was higher in New York City than in the remainder of the state.

Figure 1
BRFSS, 1991, Injury Control

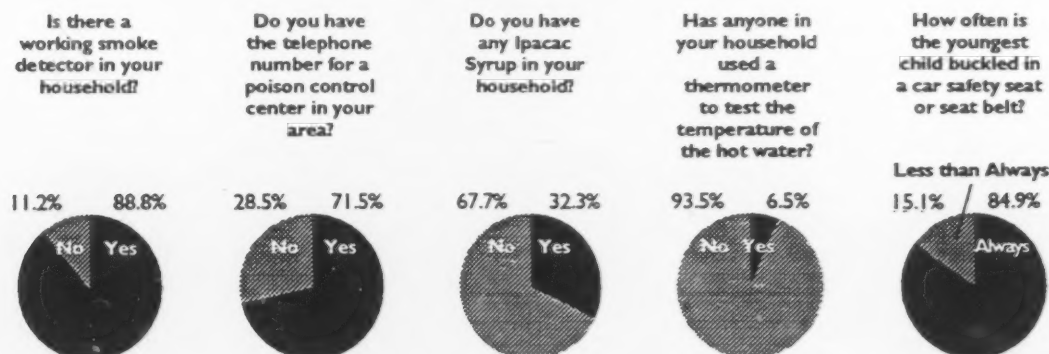


Table 1
BRFSS, 1991, Injury Control

Sociodemographic Characteristic		Working smoke detector		Test the temperature of the hot water		Poison control center phone number		Ipecac syrup in house		Safety seat or seat belt for youngest child	
		Weighted Percent	Est. 95% CI (+/-)	Weighted Percent	Est. 95% CI (+/-)	Weighted Percent	Est. 95% CI (+/-)	Weighted Percent	Est. 95% CI (+/-)	Weighted Percent	Est. 95% CI (+/-)
Total		88.8	2.1	6.5	1.7	71.5	6.2	32.3	6.4	84.9	4.8
Race	White, Non Hispanic	91.0	2.2	6.3	1.9	81.5	6.7	39.8	8.5	88.4	5.5
	non-white	82.4**	5.0	7.3	3.4	52.5**	11.3	18.6**	8.7	78.5**	9.1
Age of youngest child	<1 year	91.4	9.1	4.1	6.5	77.7	13.9	31.4	15.3	93.5	8.1
	1-4 years	87.6	13.7	9.8	12.5	71.5	19.0	41.4	20.7	90.3	12.4
	5-10 years	88.8	6.7	9.8	6.3	70.3	9.7	37.9	10.3	89.4	6.5
Income	< 15,000	83.9	5.7	7.8	4.2	56.1	17.4	29.0	16.2	77.3	14.7
	15,000-24,900	87.4	5.4	5.1	3.6	63.8	15.2	23.9	13.3	83.7	11.5
	25,000-34,900	89.0	6.2	4.8	4.3	81.4	15.2	35.7	18.5	85.2	13.7
	35,000+	88.8	4.3	7.8	3.7	72.9	12.1	25.9	11.8	84.8	9.5
Region	New York City	82.6**	2.4	5.2	4.1	55.9**	19.7	23.2**	16.6	79.6**	15.7
	Rest of State	91.5	2.4	7.0	2.2	80.7	7.0	40.4	8.7	89.3	5.4

** Statistically significant difference.

Discussion and Recommendations

There are a number of steps that can be taken within every household which could prevent injuries from occurring and greatly reduce the severity of injuries and the risk of death.

Smoke Detectors should be properly placed on every level of a house. The smoke detector should be checked monthly and cleaned periodically. The batteries on the smoke detector should be changing regularly. A good way to remember is to change the batteries when changing the clocks for daylight savings time. Smoke detectors are required in every residence by New York State law.

Water Temperature on hot water heaters should be set to no more than 120° Fahrenheit. The temperature should be set when the heater is installed and checked periodically. Another common cause of scald injuries is hot liquids from cups or the stove. Hot liquids should not be consumed with a child on lap, and when using the stove, the pot handle should be turned towards the back of the stove.

Poison Control Center Telephone Number should be placed conspicuously by all phones. When calling the poison control

center, be prepared to tell them the child's age, the kind of poison ingested as well as the amount and strength, how long ago the poison was taken, the symptoms the child is experiencing and any treatment that may have been given. It is important, however, to seek the guidance of the poison control center or a medical professional before giving any treatment.

Syrup of Ipecac is an inexpensive non-prescription liquid used to induce vomiting when certain poisons are ingested. Because not all poisons a child might ingest work in the same manner, this should not be used unless recommended by the poison control center or a physician.

Child Safety Seats and Seat Belts are required by New York State law. All children under the age of four must be placed in a child safety seat, and all children under 10 must be buckled into a seat belt at all times. In addition, all individuals in the front seat of automobiles must wear a seat belt.

Seat Belt Use

Colleen C. McLaughlin, MPH (Injury Control Program/Bureau of Cancer Epidemiology)

Introduction

The use of seat belts has been shown to reduce the risk of death in motor vehicle collisions by 40 to 50% and the risk of serious injury by 45 to 55%.¹ In addition, seat belts have been shown to reduce the need for hospitalization after motor vehicle collisions by 65%.² Despite the widespread availability of seat belts, there is still a reluctance by many individuals to use seat belts while driving or as passengers in motor vehicles.

The failure to use seat belts can arise from a number of misconceptions. For example, there is an erroneous belief that wearing seat belts entails more risk than not wearing them. In fact, many seat belt related injuries are caused by improper use of seat belts.^{3,4} Some common examples of seat belt misuse are wearing either the shoulder belt or lap belt alone, routing the shoulder harness under the arm or behind the back, wearing the lap belt too high on the abdomen and having too much slack in either the shoulder or the lap belt. A second misconception is that seat belts are not necessary under certain conditions, for example, when the car is equipped with an air bag, in the back seat of the car, in larger cars, trucks or vans, and for short trips. Air bags are only effective when used in conjunction with seat belts. Air bags are only effective in frontal collisions; they will not provide protection in side impact or roll-over crashes.

The Behavioral Risk Factor Surveillance System (BRFSS) has been collecting data on self reported seat belt use since 1983. Results from the BRFSS and other studies have shown consistent under-utilization of seat belts by certain subgroups of the population, including males, minorities, and younger people.^{5,6}

Results

Overall, 80.5 percent of New Yorkers surveyed in 1991 reported always or nearly always using seat belts (Table 1). This is still short of the Year 2000 objective for the nation of use of seat belts by 85% of motor vehicle occupants.⁷ Since the enactment of the mandatory seatbelt use law in New York State in 1985, the percentage of respondents who always or almost always use seat belts has remained between 76 and 81%.

In previous years, seat belt use was defined in BRFSS analyses as always or almost always using a seat belt. Individuals who reported that they sometimes, seldom or never use a seat belt were considered to be at risk for injury from non-use of seat belts. Because an individual is at risk of injury during each automobile trip taken without using a seat belt, the definition of seat belt non-use has been expanded to include those individuals who reported that they wear a seat belt with any frequency less than always. Only 65.6 percent of respondents to the 1991 BRFSS reported always wearing a seat belt.

Age. In general, seat belt use increased with age, with a slight decrease in use by individuals in the 55 to 64 year age group (Figure 1). Individuals 18 to 24 years of age have consistently had the lowest percentage of seat belt use throughout all the years of the BRFSS surveys. Not only do younger drivers have the lowest reported seat

belt use, but they also have higher crash rates than the general population and therefore are at even higher risk of serious injury and death. In New York State in 1990, the rate of injuries due to motor vehicle crashes among residents 15 to 24 years of age was 126.1 per 100,000 residents, while the rate among individuals of all ages was 65.0 per 100,000. The fatality rate among individuals ages 15-24 was 12.9 deaths per 100,000 residents, while the fatality rate among all ages was 6.7 deaths per 100,000.⁸

Sex. Females tended to report more frequent use of seat belts than did males (Figure 2). In New York State in 1990, males experienced higher death rates (9.2 vs. 4.3 per 100,000) and injury rates (73.6 vs. 57.1 per 100,000) than did females.⁸

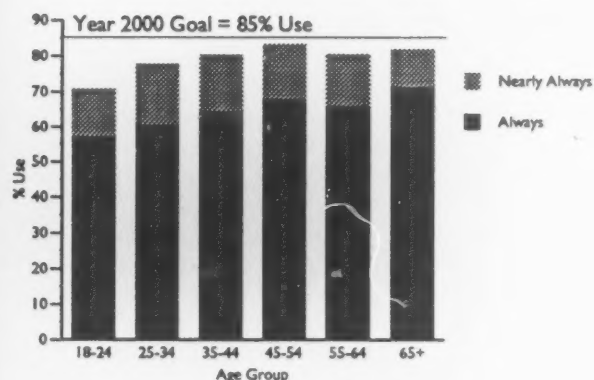
Other Characteristics. Reported seat belt use was lower among New York City residents than for the remainder of the state. A higher proportion of white respondents reported always using seat belts compared to non-whites, although this difference was not statistically

Table 1
BRFSS, 1991, Respondents who
always use seat belts

Sociodemographic Characteristic	Weighted Percent	Est. 95% CI (+/-)
Total	65.6	3.2
Sex		
Males	60.2*	5.1
Females	70.3	4.1
Age		
18-24	57.4	9.6
25-34	61.6	6.8
35-44	64.8	7.1
45-54	70.2	8.8
55-64	67.0	9.1
65+	73.5	7.1
Race		
White, Non Hispanic	66.8	3.7
Non-whites	62.0	6.5
Education		
< High School	66.0	8.6
High School	63.3	5.7
Some College	59.3	7.2
College Grad	72.9	5.4
Marital Status		
Married	69.1	4.4
Sep/Div/Wid	65.5	6.4
Never Married	57.3	6.8
Income		
< 15,000	60.1	7.7
15,000-24,900	57.6	8.1
25,000-34,900	64.3	9.6
35,000 +	68.7	6.3
Region		
New York City	69.7	4.0
Rest of State	59.6*	9.2

* Statistically significant difference, $p < 0.05$.

Figure 1
BRFSS, 1991, Seat belt use by age of respondent



significant. Higher use was also reported by respondents who had graduated from college, by respondents with a household income over \$35,000 a year, and by respondents who were married. The lower proportion of respondents always using seat belts who were never married or who had some college education, but not a college degree, might be explained by the fact that these individuals tend to be younger.

Discussion and Recommendations

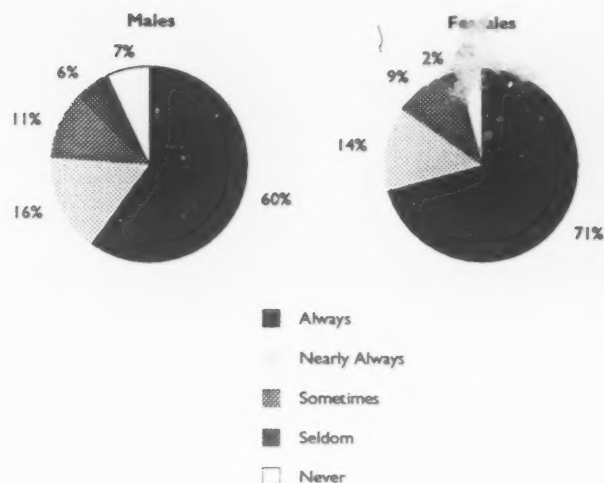
The National Committee for Injury Prevention and Control has made a number of recommendations for reducing traffic related injuries.⁹ With respect to seat belt use, the primary recommendation is for laws requiring the mandatory use of seat belts. In 1985, New York became the first state to pass a seat belt use law. Such laws have been shown to be effective in increasing seat belt use, but the most effective laws are those that have primary enforcement.¹⁰ With primary enforcement laws, a driver can be stopped by the police for the lack of seat belt use alone. In the 1989 BRFSS, the states with primary enforcement laws, including New York, ranked as the top seven states for prevalence of seat belt use while the states with no laws governing seat belt use ranked as the bottom eleven for seat belt use. Mandatory use laws need to have high profile, ongoing enforcement in order to be fully effective.

Additional recommendations by the Committee include requiring seat belt use in fleet vehicles, education on the proper use of seat belts, and increased installation and availability of air bags for use in conjunction with seat belts. Educational and behavioral change interventions need to be gender, age and culture specific, and need to provide factual information about the proper use of seat belts and to counter myths and negative attitudes about seat belts.

References

- ¹Final rule, Federal Motor Vehicle Safety Standard 208: Occupant crash protection, 49 CRP, part 571. Washington DC: National Highway Traffic Safety Administration, 1984

Figure 2
BRFSS, 1991, Seat belt use by sex of respondent



- ²Muller OE, Turnbull TL, Dunne M, et al. Efficacy of mandatory seat belt use legislation. *JAMA* 1988; 260:3593-7.

- ³Sato TB. Effects of seat belts and injuries resulting from improper use. *J Trauma* 1987;27:754-8.

- ⁴States JD, Huelke DF, Dance M, Green RN. Fatal injuries caused by underarm use of shoulder belts. *J Trauma* 1987;27:740-5.

- ⁵Colon, I. Race, belief in destiny and seat belt usage: a pilot study. *Amer. J Public Health* 1992;82:8756.

- ⁶Preusser DF, Williams AF, Lund AK. Characteristics of belted and unbelted drivers. *Accid. Anal. & Prev.* 1991;23:475-82.

- ⁷Healthy People 2000, National Health Promotion and Disease Prevention Objectives. United States Department of Health and Human Services, Public Health Service, DHHS Pub. No. (PHS) 91-50213.

- ⁸New York State Department of Health, Injury Control Program, 1990.

- ⁹The National Committee for Injury Prevention and Control. *Injury Prevention: Meeting the Challenge*. Published by Oxford University Press as a supplement to the *Amer. J of Prev. Med.* 1989;5(3):115-45.

- ¹⁰Escobedo LG, Chorba TL, Remington PL et al. The influence of safety belt laws on self-reported safety belt use in the United States. *Accid. Anal. & Prev.* 1992;24:643-653.

Behavioral Risk Factor Surveillance System

New York State 1991 Summary Report

Vol. I, No. 2

Summer 1993

The Centers for Disease Control and Prevention (CDC) provide funding and technical assistance to the Behavioral Risk Factor Surveillance System (BRFSS) which was introduced in New York State in 1983 and has been conducted annually since 1985. Standardized questions developed by CDC are administered via a telephone survey. The 1991 BRFSS was conducted in forty-seven states plus the District of Columbia. This survey provides state-specific prevalence estimates of diseases and preventable behaviors attributable to early morbidity and mortality. These data are used to plan and promote health programs, support legislative decisions, and assess health-related behaviors.

The Behavioral Risk Factor Surveillance System - Summary Report is published quarterly. Issues will contain brief summaries on the risk factors included in each year's survey. Occasionally, issues will summarize special surveys, analysis of trends, and more in-depth discussion of specific risk topics. Copies may be obtained by contacting:

New York State Department of Health
BRFSS Coordinator
Bureau of Adult and Gerontological Health
Empire State Plaza, Rm. 557, Corning Tower
Albany, NY 12237

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NEW YORK STATE DEPARTMENT OF HEALTH

AIDS

Alison Muse (AIDS Epidemiology Program)

Introduction

As the epidemic of the acquired immune deficiency syndrome (AIDS) enters its second decade, New York State continues to be the epicenter with an annual AIDS rate of 46.0 cases per 100,000 population.¹ National health promotion and disease prevention objectives for the year 2000 include limiting annual AIDS incidence and prevalence of human immunodeficiency virus (HIV) infection, increasing the proportion of HIV-infected people who have been tested and increasing the use of condoms.² National and local efforts

to meet these objectives focus on public health intervention programs. Information on knowledge of and attitudes about HIV/AIDS is important for designing and evaluating intervention activities. The BRFSS is an important source of information on New Yorkers' knowledge and attitudes concerning HIV/AIDS.

Results

Table 1 compares responses from the 1990 and 1991 surveys — the first two years such data have been collected in New York State.

Table 1
1991 BRFSS
Knowledge and attitudes about AIDS

Questions	1990		1991		Percent Difference
	% Yes	Est. 95% CI (+/-)	% Yes	Est. 95% CI (+/-)	
Have you ever heard of the AIDS virus called HIV?	83.1	3.0	92.0	1.8	8.9
To your knowledge, are there drugs available to lengthen the life of a person infected with the AIDS virus?	53.9	3.9	54.9	3.3	1.0
Do you think a person who is infected with the AIDS virus can look and feel well and healthy?	65.5	3.7	69.3	3.1	3.8
Do you think you can get infected with the AIDS virus from giving blood?	31.4	3.7	41.4	3.3	10.0
Would you eat in a restaurant where the cook is infected with the AIDS virus?	21.6	3.2	14.3	2.3	-7.3
Would you be willing to work with a person who is infected with the AIDS virus?	64.6	3.8	64.5	3.2	-0.1
Do you think a condom is a very effective method in preventing getting the AIDS virus through sexual activity?	31.8	3.7	28.0	3.0	-3.8

In general, the findings from both years were similar. As in 1990, the majority (92.0%) of respondents knew the AIDS virus was called HIV but only 54.9 percent were aware that drugs were available that can lengthen the life of an infected person, and fewer than one-third of respondents thought a condom was a very effective method for preventing sexual transmission of HIV.

Misconceptions regarding HIV transmission and fears about casual contact with an HIV-infected person were also evident from survey responses. When asked "Do you think a person can get AIDS or the AIDS virus from donating blood?", 41 percent of respondents answered "yes," a 10 percent increase from 1990. Fewer than 15 percent were willing to eat in a restaurant where the cook was HIV-infected, 7 percent fewer than those indicating a willingness in 1990. While most people were willing to work with an HIV-infected person, 35 percent were not.

When asked where one could go to be tested for the AIDS virus, the two most frequently cited sources were hospital emergency rooms and private physicians, both private settings. Fewer than 10 percent identified public sources (health departments or sexually transmitted disease, AIDS or family planning clinics) as potential HIV testing sites. More importantly, 14 percent of respondents answered that they did not know where they could go to be tested.

For all questions, people of higher income and more than 12 years of education were more knowledgeable. In addition, people younger than 45 were more knowledgeable than older people; married or never married individuals were more knowledgeable than widowed, separated or divorced people; and those residing in New York State outside of New York City, were more knowledgeable than New York City residents. Differences in knowledge were not noted by gender or race/ethnicity.

Discussion/Recommendations

The survey results suggest that some New Yorkers may be misinformed about HIV/AIDS. Incomplete knowledge of AIDS risk factors and of preventive measures may lead to behaviors that place a person at risk. Two-thirds of respondents failed to answer that

condoms were a very effective method for preventing HIV transmission, although the term "very effective" was subject to interpretation by the respondent. Individuals who do not recognize the potential value of condoms in reducing HIV transmission may place themselves at risk for HIV infection through unprotected sexual intercourse. Only 55 percent of respondents were aware of the availability of drugs which can lengthen the life of an HIV-infected person and 31 percent either did not think or did not know an HIV-infected person could look and feel well and healthy. Such beliefs might cause people at risk of HIV infection to delay seeking HIV testing and treatment. Finally, respondents' lack of knowledge regarding the availability of sources for HIV antibody testing or the wide range of such sources might also cause individuals at risk to delay seeking HIV testing. It should be noted that survey respondents were representative of the New York State population and not of the population of HIV-infected people. Knowledge among HIV-infected people may be more complete.

To meet national HIV prevention objectives, educational programs are essential. The results of the 1991 BRFSS indicate the need to continue and expand educational activities in New York State. Given the higher prevalence of misinformation and misperceptions exhibited by certain sociodemographic groups, information provided through educational efforts must be sensitive to the cultural background and reading comprehension level of the target population. Since the majority of respondents identified private settings as sources of HIV antibody testing, it is important that these providers be well-informed and equipped to provide effective counseling and testing.

References

1. Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report, Year End Edition*. February, 1993;1-23.
2. United States Department of Health and Human Services. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. DHHS Pub. No. (PHS) 91-50213.

Alcohol

Colleen C. McLaughlin, MPH (Injury Control Program)

Introduction

It has been estimated that just under 5 percent of all deaths can be attributed to either chronic or acute alcohol consumption.¹ Alcohol related causes of mortality accounted for an estimated 6,526 deaths in New York in 1985.² Table 1 presents the alcohol attributable fractions broken down by specific causes of death. In addition to the causes listed in Table 1, alcohol accounts for between 5 percent and 10 percent of deaths due to the most common causes including hypertension, strokes, diabetes mellitus, pneumonia and flu. These mortality statistics, however, present only a fraction of the overall impact of alcohol on health. For example, one study of children revealed that for every death due to injury, there are 45 injuries requiring hospitalization and 1,300 injuries resulting in visits to the emergency room.³ There are also many adverse outcomes that are not reflected in the mortality statistics, such as, fetal alcohol syndrome, birth defects and low birthweight.

Table 1
New York State
Alcohol attributable fractions
by cause of death^a

Cause of Death	Percent of Deaths
Chronic Alcohol Consumption	
alcohol dependence syndrome	100
alcoholic cardiomyopathy	100
alcoholic hepatitis	100
alcoholic cirrhosis	100
esophageal cancer	75
chronic pancreatitis	60
cirrhosis with no mention of alcohol	50
cancers of the oral cavity, pharynx and larynx	50
acute pancreatitis	42
respiratory tuberculosis	25
stomach cancer	20
liver cancer	15
Acute Alcohol Consumption	
alcohol poisoning	100
homicides	46
fire	45
motor vehicle crashes	42
drownings	38
falls	35
suicides	28

^aAdapted from reference 1

Accompanying these health outcomes are the economic and societal costs of alcohol misuse. The economic costs include the direct medical care costs of diagnosing and treating injuries and chronic illness related to alcohol and the indirect costs related to loss of productivity, premature death or disability, property destruction and criminal prosecution and imprisonment. In New York State in 1985, more than 500 million dollars were spent on hospitalization for alcohol related injuries and illnesses.²

The BRFSS collects information from New York State residents on the prevalence of current, acute and chronic alcohol consumption, as well as the prevalence of drinking and driving. *Current drinking* is defined as having had any alcoholic drinks in the past month. *Acute drinking* is defined as having had five or more drinks on at least one occasion in the past month. *Chronic drinking* is defined as having an average of two or more drinks per day during the past month. *Drinking and driving* is defined as having driven after having "perhaps too much to drink" on at least one occasion in the past month.

Results

In 1991, 50.0 percent of respondents in New York State reported having consumed any alcoholic beverage in the previous month (Table 2). This puts New York State about in the middle of the states that participated in the 1991 BRFSS survey (median = 51.2%). New York State, however, has the lowest proportion of current drinkers of all the states in the northeastern United States (Table 3).

While half of all respondents reported current drinking, 11.7 percent reported acute drinking and 2.5 percent reported chronic drinking (Table 2). Due to the small percentage of respondents who reported chronic drinking, caution should be used in interpreting these numbers. Just under 2 percent of all respondents reported an occurrence of drinking and driving in the past month.

Sex: Males were more likely to report being at risk from alcohol consumption than were females. The differences between males and females were statistically significant for all risk factors. While 3 percent (+/- 1.8%) of male respondents reported drinking and driving, only 1 percent (+/- 0.8%) of females respondents reported an episode of drinking and driving.

Age: For current drinking, acute drinking and drinking and driving, the percent of respondents who reported being at risk decreased with age. For chronic drinking, on the other hand, the lowest proportion at risk was the middle age group, 35 to 54 years old. Some age groups have been combined in Table 2 due to the small number of respondents. The pattern of drinking varied by age. The proportion of current drinkers who drank every week increased

Table 2
1991 BRFSS
Percent of respondents at risk from alcohol consumption

Sociodemographic Characteristic		Current Drinking		Acute Drinking		Chronic Drinking	
		Weighted Percent	Est. 95% CI(+/-)	Weighted Percent	Est. 95% CI(+/-)	Weighted Percent	Est. 95% CI(+/-)
Total		50.0	3.4	11.7	2.2	2.5	1.1
Sex	Males	61.1	5.0	18.3	4.0	4.6	2.2
	Females	40.4	4.3	6.1	2.1	0.7	0.8
Age	18-34	57.5	5.6	20.0	4.6	3.1	2.0
	35-54	52.6	5.8	9.5	3.4	1.9	1.6
	55+	39.7	5.9	4.8	2.6	2.7	2.0
Race	White, Non Hispanic	53.7	3.9	12.5	2.6	2.4	1.4
	Other	39.5	6.4	9.4	3.8	2.5	2.1
Education	< High School ^a	29.7	8.0	8.1	4.8	3.3	3.1
	High School	45.8	5.8	11.9	3.8	3.4	2.1
	Some College ^a	55.4	7.2	17.6	5.5	1.6	1.9
	College Grad	61.4	5.9	9.1	3.5	1.9	1.7
Marital Status	Married	49.9	4.8	8.5	2.7	1.9	1.3
	Sep/Div/Wid ^a	40.5	6.5	9.2	3.8	3.0	2.3
	Never Married ^a	57.8	6.7	21.3	5.6	3.6	2.5
Income	< 15,000 ^a	37.6	7.4	8.2	2.9	2.1	2.2
	15,000-24,900 ^a	49.9	8.1	13.8	3.0	2.7	2.6
	25,000-34,900 ^a	52.7	9.9	17.4	7.5	4.8	4.3
	35,000+ ^a	47.9	6.7	10.8	4.2	2.1	1.9
Region	New York City	44.9	5.3	8.2	2.9	2.0	1.5
	Remainder of State	53.0	4.3	13.8	3.0	2.8	1.5

^a Percentages are based on fewer than 500 individuals in these categories, and should be interpreted with caution.

with age while the proportion who reported that they average three or more drinks per occasion decreased with age (Figure 1).

Race: Higher proportions of white non-Hispanic respondents reported being at risk from current and acute drinking than did people of other race or ethnicity. The proportion of respondents who reported chronic drinking did not vary by race. Some age groups have been combined in Table 2 due to the small number of respondents.

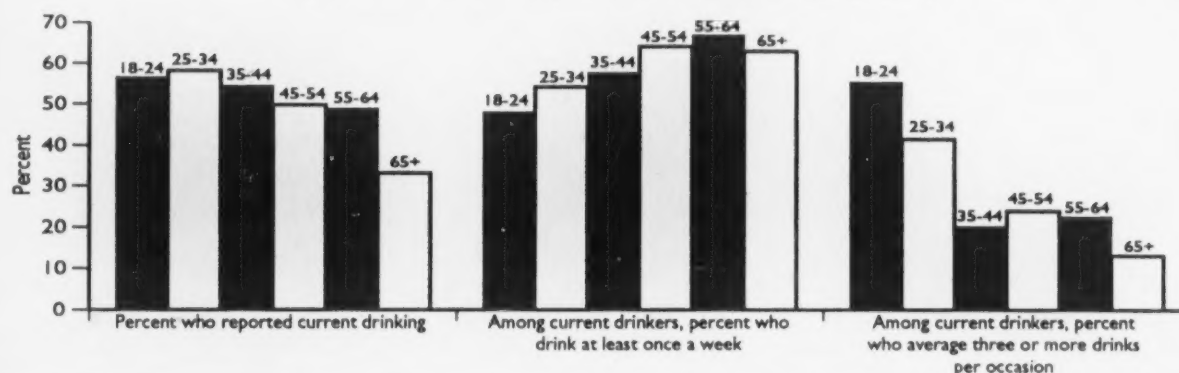
Education: The proportion of respondents who reported current drinking increased with higher educational attainment. Respondents who had never attended college were more likely to report chronic drinking, while respondents who reported that they had attended college but not graduated were more likely to report being at risk from acute drinking. The category of some college probably included more younger respondents, who were still in college.

Marital Status: Individuals who were never married were more likely to be at risk from alcohol consumption than were those who had ever been married. The most striking difference is with acute drinking; 21 percent of never married individuals reported having had more than five drinks on at least one occasion in the past month, while only 9 percent of ever married individuals reported similar risk. As with education, this may be due to the fact that never married individuals tend to be younger than those ever married.

Income: Respondents who reported income in the \$25,000 to \$34,900 range were more likely to report being at risk from current drinking and from acute and chronic consumption.

Region: Lower proportions of New York City residents reported being at risk from alcohol consumption than residents of the remainder of New York State.

Figure 1, 1991 BRFSS, Respondents' use of alcohol, by age group



Discussion and Recommendations

Although these data most likely underestimate the true prevalence of risk from alcohol consumption, they do indicate some interesting trends. Younger respondents were more likely to have had any alcohol in the past month, but those who did report current drinking tended to drink less often than older current drinkers. Younger respondents reported consuming more alcohol per occasion than the older respondents. They were also more likely to report having driven an automobile when they had too much to drink.

The pattern of alcohol use can be very important in determining health outcomes. Acute drinking puts a person at immediate risk for injuries. People ages 18 to 24 have high motor vehicle crash rates and intentional injury rates. This is related not only to the fact that they are more likely to binge drink, but they also engage in other high risk behaviors. On the other hand, chronic diseases related to alcohol are more likely to result from moderate to heavy long term alcohol consumption. Of the older respondents who drink, the fact that they tended to drink more frequently puts them at higher risk for chronic conditions. It should also be remembered that alcohol consumption at any level is inappropriate in some situations, such as among pregnant women, among children and teenagers or before operating automobiles, motor boats or machinery.

The average age that Americans start drinking is between 12 and 13 years, and research has shown that early sustained alcohol use contributes to a lifetime of mental and physical health problems.⁴ Factors that foster alcohol use and abuse include mental well-being, genetic predisposition and determinants of risk taking behavior, such as belief in invulnerability (host factors); the availability and monetary cost of alcohol (agent factors); the social norms within the community and peer group; the monetary, societal and health related costs of drinking; laws regulating drinking age and penalties for drinking and driving; and modes and timing of advertising for alcoholic beverages (environment factors). All of these factors are points at which interventions can be successfully initiated.

References

- Centers for Disease Control. Alcohol-related mortality and years potential life lost - United States, 1987. *MMWR* 1990;39:173-178.
- Division of Epidemiology, New York State Department of Health. *Alcohol and Public Health: Implications for New York State*. A Report to the Commissioner of Health, January, 1989.
- Gallagher SS, Finison K, Guyer B, Goodenough SH. The incidence of injuries among 87,000 Massachusetts children and adolescents: results of the 1980-1981 statewide childhood injury prevention surveillance system. *Am J Public Health* 1984;32:5-16.
- US Public Health Service. *Progress report on Healthy People 2000: Alcohol and other drugs*. February 1992.

Table 3
1991 BRFSS
Percent of Respondents At Risk
From Alcohol Consumption for Selected States

State	Current Drinking	Acute Drinking	Chronic Drinking
Connecticut	62.1	14.8	3.9
Maine	51.2	10.3	3.4
Massachusetts	65.5	20.1	5.2
New Hampshire	65.3	19.6	5.4
New Jersey	56.3	9.7	3.9
New York	50.0	11.6	2.5
Pennsylvania	57.8	20.0	5.1
Rhode Island	60.3	16.9	4.8
Vermont	59.9	16.1	3.5

Mammography

Susan True (Cancer Services Program)
and Patricia P. Lillquist, MSW (Bureau of Cancer Epidemiology)

Introduction

Breast cancer remains the leading cause of cancer death among women in New York, with approximately 11,000 new cases diagnosed and 3,700 deaths reported each year. Most authorities agree that breast cancer deaths could be reduced by 30 percent or more if women participated in comprehensive screening programs designed to detect breast cancer in its earliest, most treatable stages. Since 1989, New York has supported screening programs in communities around the state where the incidence and mortality from breast cancer has been high, and where there are large minority or low-income populations. Together, these programs have served more than 38,000 women since their inception.

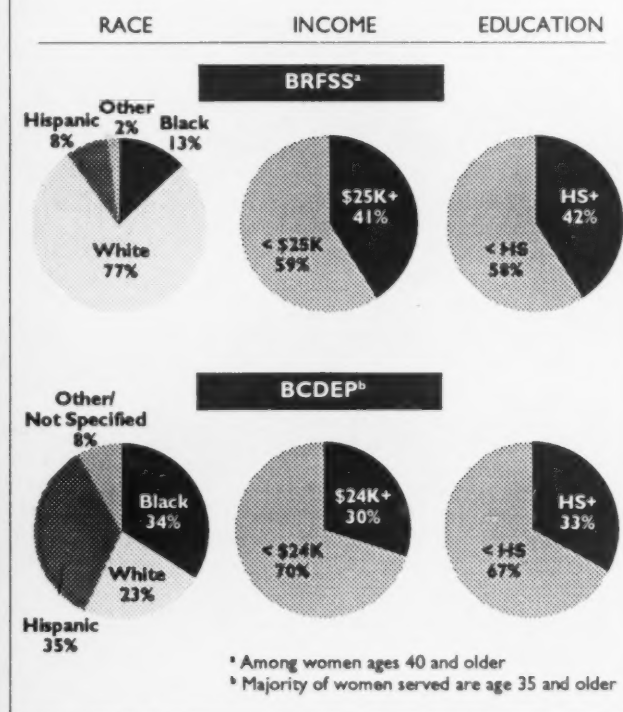
Changes planned for the 1993-94 program period include the development of Breast Health Partnerships in all remaining counties and boroughs across the state. Through these partnerships, human service agencies, medical care providers and community groups agree to coordinate and link their resources to promote and provide screening services, with special emphasis on reaching women who have not been screened before, and who are unlikely to participate without addressing financial or insurance barriers.

Results

The 1991 BRFSS showed no significant change from 1990 results in the proportion of women having mammograms and clinical breast exams; sixty-eight percent of women aged 40 and older received a mammogram and 55 percent of women aged 50 and older received one in the past two years. The national goal for ever having had a mammogram is 80 percent for women over 40, and 60 percent for women over 50 to have had a mammogram within the past two years. As evident in past years, screening prevalence declined with age, although these differences are not statistically significant. These findings may indicate that the women who can be persuaded through general public education, "first person" media accounts and direct program publicity to participate in screening have already been reached. Public health efforts must be directed to those women who are deterred from screening by other factors, such as mistrust of the medical care system, fear of cancer, cultural beliefs about appropriate health practices and behaviors or language barriers. As currently structured, the BRFSS questionnaire does not address barriers to participation.

Women seen in state-supported screening clinics are representative of this harder-to-reach population. Unfortunately, their number is not large enough to impact the statewide BRFSS. Figure 1 illustrates the differences between the surveyed population and the women screened through the Department of Health Breast Cancer Detection and Education Program (BCDEP). Women screened through this program are more likely to be members of minority groups, to have incomes under \$24,000 and to have a high school education or less.

Figure 1
Comparison of demographic characteristics
of women surveyed through BRFSS and
women reached in BCDEP program



Discussion

New York State has embarked upon two projects to increase knowledge about special populations. The first, to be accomplished using BRFSS methodology, is a survey of black women across the state to determine their screening practices. This group is under-represented in the statewide survey, and it is important to know the extent to which the general responses are representative of black women. A second study, using focus groups and individual interviews, seeks to define the barriers to care experienced by five subgroups: migrant workers, older black women, Latinas of all ages, older rural women and American Indian women. This study is being pilot tested in the Genesee Valley area of New York State. Results of these two surveys will shape both public and professional education strategies and public health policy.

Expanding and improving the effectiveness of the statewide Breast Cancer Detection and Education Program is a public health priority in New York. Activities initiated this year will be reflected in the BRFSS in the future.

Pap Smear Screening

Pat P. Lillquist, MSW (Bureau of Cancer Epidemiology)
and Aura Weinstein, MPH (Bureau of Cancer Epidemiology)

Introduction

Between 1984 and 1988, an average of 1,054 cases of invasive cervical cancer per year were diagnosed in New York State, approximately evenly distributed between New York City and the rest of the state. Another 2,000 women a year were diagnosed with *in situ* cervical cancer for the same period. Despite the ability of regular, quality Pap screening to prevent deaths, 351 women died from this form of cancer in 1990. The Cancer Advisory Panel to the New York State Department of Health has issued cancer screening guidelines for physicians. For cervical cancer, these guidelines recommend an annual Pap smear for all women ages 20 to 70 and for sexually active women under the age of 20. The guidelines also advise physicians that women who have been exposed to diethylstilbestrol (DES), who are in lower socioeconomic groups and who live in rural areas are at increased risk.

The national Pap screening goal is 95 percent of women ages 18 and older to have received a Pap test, and 85 percent to have been screened within the past one to three years.¹

Results

Because goals for the year 2000 apply only to women who have not had a hysterectomy, 15 percent of female respondents to the 1991 BRFSS survey who had a hysterectomy were excluded from analyses. Table 1 presents the proportion of women who reported ever having had a Pap test, and those who had a recent Pap test (within the past two years) by various sociodemographic characteristics. Although many categories of women were at or above the goal of 95 percent, younger women and women who had never married

were less likely to report ever having a Pap test. These were the same sociodemographic groups that were also less likely to have been screened recently. In addition, although 84 percent of women over age 65 reported having had a Pap test at some time in the past, only 64 percent had the test within the past two years. The proportion reporting Pap screening did not differ by race. A lower proportion of New York City women reported ever having a Pap test.

Discussion/Recommendations

Although screening behavior for most segments of the population is in accordance with screening guidelines, additional public health efforts in the area of cervical cancer should be targeted toward younger women, women over age 65 and women with lower than a high school education. A number of barriers to cervical screening have been reported in the literature.¹ Fear and embarrassment were barriers identified for teenagers, while for older women, lack of physician referral is a primary barrier, along with beliefs and lack of knowledge. Programs serving these populations should be aware of these barriers and formulate methods for overcoming them.

References

1. United States Department of Health and Human Services. Healthy People 2000: National Health Promotion and Disease Prevention Objectives. *DHSS Pub. No. (PHS) 91-50213*.
2. *Breast and cervical screening: barriers and use among specific populations*. Literature review prepared for public health planners, AMC Cancer Research Center, March 1992.

1991 BRFSS
Weighted percent of female respondents' use of PAP tests
among women who had not reported hysterectomy

Sociodemographic Characteristics		Ever received a PAP test		Received a PAP test within the past 1-2 years	
		Weighted Percent	Est. 95% C.I. (+/-)	Weighted Percent	Est. 95% C.I. (+/-)
Healthy people objective for the year 2000		95		85*	
Total		92	3	83	4
Age					
	18-24	74	13	74	13
	25-34	96	4	94	15
	35-44	100	<1	92	6
	45-54	97	5	85	11
	55-64	92	9	73	16
	65+	84	10	64	15
Race					
	White	93	2	83	5
	Black	90	4	86	10
	Other	87	5	79	12
Education					
	< High School	82	6	68	15
	High School Graduate	91	3	82	7
	Some College	89	3	83	9
	College	97	1	89	6
Marital Status					
	Married/Unmarried couple	97	1	88	5
	Separated/Divorced/Widowed	94	2	79	8
	Never Married	77	5	73	10
Income					
	< \$15,000	86	4	75	11
	\$15,000 - \$24,900	88	4	78	11
	\$25,000 - \$34,900	97	2	90	9
	\$35,000 +	92	3	84	8
Region					
	New York City	88	2	82	5
	Rest of State	94	3	83	6

*Objective set is for Pap test within the past one to three years.

Tobacco Use

Russell C. Sciandra, MA (Bureau of Adult and Gerontological Health)

Introduction

Tobacco use, particularly cigarette smoking, is the most important preventable cause of death and disease in New York State. Twice as many people are killed by tobacco as die from AIDS, motor vehicle accidents, breast cancer, suicide and homicide combined. The most recent estimates set total tobacco-attributable deaths in New York State at 33,404 annually. Gross health care costs, lost wages and lost productivity total \$6 billion per year. Because it has such a large impact on public health, even small changes in the patterns of tobacco use are significant.

Smoking prevalence in the United States declined fairly steadily for 20 years following publication of the first Surgeon General's Report in 1964, falling at a rate of one-half percentage point per year. During the period 1987 to 1990, the rate of decline accelerated, averaging more than one percentage point per year. By 1990, the prevalence of cigarette use among adults fell from 40.4 percent in 1965 to 25.5 percent. However, the 1991 National Health Interview Survey showed smoking prevalence unchanged from 1990 at 25.7 percent.¹ In New York State, the prevalence of regular cigarette use declined from 31.4 percent in 1985 to 23.2 percent in 1987. Subsequent years showed very little change and in 1990, prevalence was 22.5 percent.

Results

Table 1 presents the percentages, for the total population and various demographic groups, of current regular cigarette smokers. In 1991, 23 percent of adults were current regular smokers, a small but not statistically significant increase over 1990. There were few important differences in smoking prevalence among demographic groups. The smoking rate was highest between 25 and 44 years of age and lowest after age 65. The rate for New York City was lower than that for the rest of the state, probably a function of the city's high nonwhite population. The best predictor of tobacco use is educational attainment. College graduates exhibited much lower smoking rates than those with fewer years of education. As the difference in tobacco use rates between the best and least educated has become greater, the burden of disease associated with smoking is increasingly falling upon the less advantaged sectors of society.

In 1991, the average number of cigarettes smoked per day by regular smokers was 16.7. In 1987, the average number of cigarettes smoked was 17.9. Thus, while the prevalence of smoking was essentially unchanged from 1987 reported consumption among regular smokers declined 6.8 percent. Rates of irregular smoking were unchanged. Between 1987 and 1991, an alternative measure of consumption - state tax paid cigarette sales - fell 20 percent, from

Table 1
1991 BRFSS
Adults reporting they are
current regular cigarette smokers

Sociodemographic Characteristic	Weighted Percent	Est. 95% CI (+/-)
Total	23.0	2.8
Sex		
Male	24.9	4.5
Female	21.3	3.6
Age		
18-24	25.9	8.5
25-34	27.1	6.2
35-44	28.7	6.8
45-54	22.1	7.8
55-64	20.5	7.7
65+	12.7	5.3
Race		
White, NonHispanic	23.3	3.3
Non-White	22.0	5.4
Education		
<High School	21.8	7.2
High School Graduate	29.1	5.3
Some College	23.4	6.2
College Graduate	16.2	4.4
Marital Status		
Married	22.3	4.0
Sep/Div/Wid	23.0	5.6
Never Married	24.7	5.8
Income		
<\$15,000	27.8	6.9
15,000-24,999	27.6	7.2
25,000-34,999	29.6	9.1
35,000	23.2	5.7
Region		
New York City	21.0	3.7
Rest of State	24.1	4.3

1.955 billion packs to 1.561 billion. During the same period, the cost of cigarettes in New York State increased 60 percent.²

Discussion/Recommendations

The plateau in smoking prevalence over a five-year period is cause for concern. Two factors may contribute to this leveling:

- The steady growth in market share of discount cigarettes has helped ameliorate the impact of price and excise tax increases. Smokers who would have quit to avoid paying higher prices may instead have switched to lower-priced brands.
- Tobacco industry national expenditures for advertising and promotion have increased 55 percent since 1987.³ Advertising may entice children to begin smoking and reduce adult smokers' resolve to quit.

The decline in average daily consumption may reflect the impact of the New York State Clean Indoor Air Act, which has restricted smoking in many public places and in worksites since early 1990. Several researchers have found an association between employment in a setting where smoking is restricted or banned and reduced workday consumption of cigarettes.^{4,5} Because the incidence of smoking-related disease increases with exposure, reducing total consumption may have public health benefit. However, the same reduction in consumption would have a greater effect on disease incidence if achieved through lower prevalence.

Reasons for the discrepancy between changes in self-reported consumption and that observed in actual sales is unclear and may be attributable to a combination of deficiencies in each measure. For example, the decline in tax paid sales may reflect, in part, increased tax avoidance. Examples of tax avoidance are cross-border shopping and untaxed purchases on Indian reservations. It is unlikely this behavior accounts for more than a fraction of the discrepancy.

Prevalence of teenage smoking is another measure not provided by the BRFSS. Declines in smoking in certain groups not surveyed, such as teenagers, may account for part of the difference between the two measures. Issues such as this point up the need to institute a more extensive tobacco use surveillance system than is currently available through BRFSS. Such a system would include surveys of adolescents, including those not in school, and of adults. It should include samples sizes sufficient to allow monitoring of important population subgroups.

The national health objectives for the year 2000 establish the goal of an adult smoking prevalence of 15 percent. Attaining this goal will require intensified efforts to discourage the use of tobacco by helping smokers break their nicotine addiction, persuading children never to start smoking and enacting public policies that discourage smoking. Such policies include increased taxes on tobacco products, stronger restrictions on smoking in public places, reducing and restricting tobacco product advertising and enforcing laws prohibiting the sale of tobacco products to minors.

References

1. Cigarette Smoking Among Adults—United States, 1991 *Morbidity and Mortality Weekly Report*, April 2, 1993.
2. The Tobacco Institute. *The Tax Burden on Tobacco*, Vol. 27, 1993.
3. Federal Trade Commission. *Federal Trade Commission Report to Congress for 1990, 1992*.
4. Borland, R, et al. Changes in smoking behavior following the implementation of a total workplace smoking ban. *Australian Journal of Public Health*. 1991; 15:130-134.
5. Wakefield, M, et al. Workplace smoking restrictions, occupational status, and reduced cigarette consumption. *Journal of Occupational Medicine*. 1992;34: 693-697.

NOTICE TO READERS

In Vol 1, No. 1 of the 1991 Behavioral Risk Factor Surveillance System Summary Report the following data should be substituted for **region** included in the sociodemographic tables

Risk Factor	Region	Weighted Percent	Est. 95% CI (+/-)
Hypertension			
Table 1. Adults reporting having a blood pressure reading in the past year	New York City	94.2	2.5
	Rest of State	93.7	2.1
Table 2. Adults reporting a health professional informed them they were hypertensive	New York City	21.0	4.3
	Rest of State	21.7	3.6
Physical Activity			
Table 1. Adults reporting sedentary lifestyle behavior	New York City	61.6	5.2
	Rest of State	56.6	4.3
Injury Control			
Working Smoke Detector	New York City	84.3*	3.9
	Rest of State	91.5	2.4
Test the temperature of the hot water	New York City	5.7	2.5
	Rest of State	7.0	2.2
Poison control center phone number	New York City	57.1*	10.7
	Rest of State	80.7	7.0
Ipecac syrup in house	New York City	19.7*	8.5
	Rest of State	40.4	8.7
Safety seat or seat belt for youngest child	New York City	78.1*	8.8
	Rest of State	89.3	5.4
Seat Belt Use:			
Respondents who always use seat belts	New York City	69.7	4.0
	Rest of State	58.3*	5.3

* Statistically significant difference

Behavioral Risk Factor Surveillance System

New York State 1992 Summary Report

Vol. 1, No. 3

Fall 1993

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The Centers for Disease Control and Prevention (CDC) provide funding and technical assistance to the Behavioral Risk Factor Surveillance System (BRFSS) which was introduced in New York State in 1983 and has been conducted annually since 1985. Standardized questions developed by CDC are administered via a Random-Selection telephone survey. The 1992 BRFSS was conducted in forty-eight states plus the District of Columbia. This survey provides state-specific prevalence estimates of diseases and preventable behaviors attributable to early morbidity and mortality. These data are used to assess health-related behaviors, plan and promote health programs and support legislative decisions.

Approximately 2400 New York State residents 18 years and older completed the telephone survey in 1992. Respondents are selected randomly from all New York State residents with telephones, using a probability sampling method. We use a multistage cluster design procedure based on the Waksberg Random Digit Dialing Technique. After a household has been contacted, the respondent is randomly selected from those adults residing in the household. The survey is administered by trained interviewers using a Computer-Assisted Telephone Interviewing (CATI) system.

One limitation of the survey data is that prevalence ratios of risk factors for some sociodemographic groups may have a large sampling error due to the small size of the sample in these subgroups. Other factors that affect the validity of the data or quality of the data are the respondents' honesty, accurate recall of information or not understanding the question. *Responses such as unknown or refused are included in the calculation of the percentages but not always represented in the figures.*

The Behavioral Risk Factor Surveillance System - Summary Report is published quarterly. Issues will contain brief summaries on the risk factors included in each year's survey. Occasionally, issues will summarize special surveys, analysis of trends, and more in-depth discussion of specific risk topics. Copies may be obtained by contacting:

New York State Department of Health
BRFSS Coordinator
Bureau of Adult and Gerontological Health
Empire State Plaza, Rm. 557, Corning Tower
Albany, NY 12237

or by phone: (518) 474-0512

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Bureau of Adult & Gerontological Health
NEW YORK STATE DEPARTMENT OF HEALTH

AIDS

Alison Muse, MPH
(AIDS Epidemiology)

- Overall, 96.7 percent of New Yorkers reported that they have heard of the AIDS virus.
- 58 percent were aware that drugs can lengthen the life of a person infected with the AIDS virus.
- Persons with a college or post-graduate degree were twice as likely to know of available drugs as those with less than a high school education. See Figure 1.
- 42 percent believed that they could get infected with the AIDS virus from donating blood. This misconception about HIV transmission decreased with increasing education. See Figure 2.

Figure 1: "To your knowledge, are there drugs available which can lengthen the life of a person infected with the AIDS virus?"

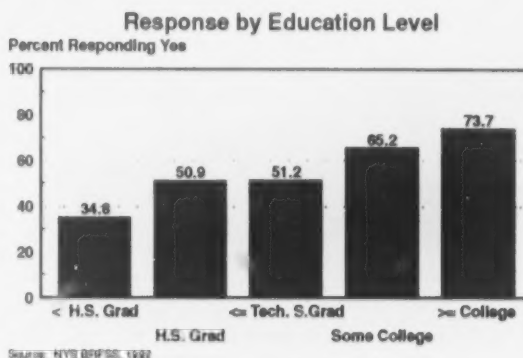
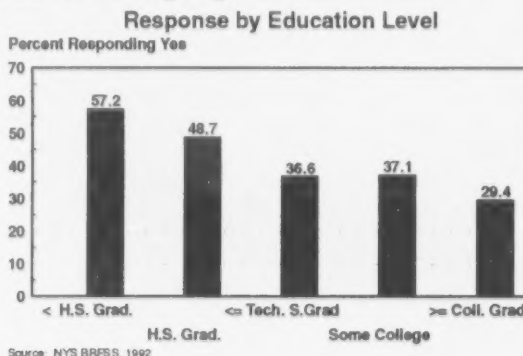


Figure 2: "Do you think you can get infected with the AIDS virus from giving blood?"

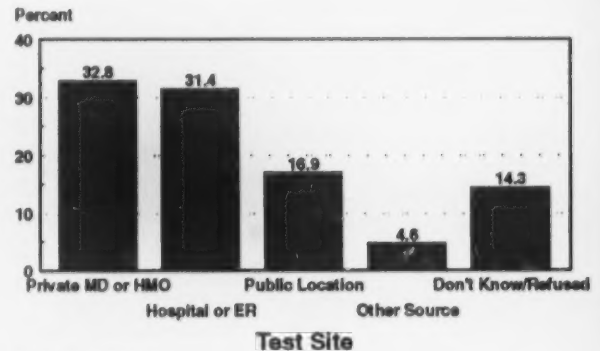


Note: AIDS related questions were asked to determine the respondents' knowledge, behaviors, and opinions related to the national health problem of AIDS and the HIV virus.

AIDS (CONTINUED)

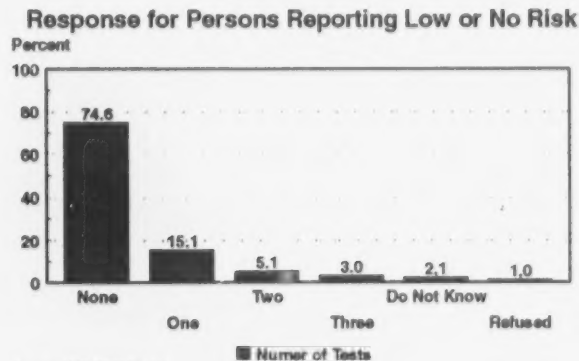
- Hospitals, emergency rooms or private doctors' offices were the most frequently cited sources for being tested for the AIDS virus. See Figure 3.
- Fewer than 20 percent of respondents identified public health locations (health departments or STD, AIDS or family planning clinics) as test sites; 14 percent were unaware of or did not indicate where they could go to be tested. See Figure 3.

Figure 3: "Where could you go to be tested for the AIDS virus?"



Source: NYB DRFBS, 1992

Figure 4: "How many times have you had your blood tested for the AIDS virus infection?"



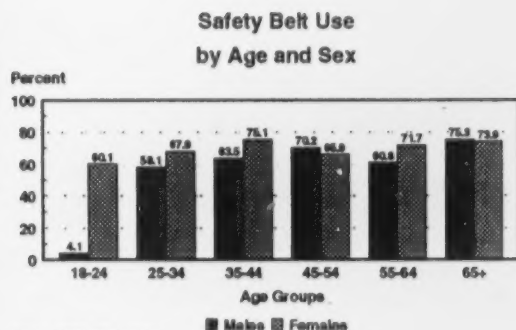
Source: NYB DRFBS, 1992

- 89 percent of respondents perceived themselves to be at low or no risk of having the AIDS virus infection. However, 23 percent of this group reported having their blood tested for the AIDS virus one or more times. See Figure 4.

Safety Belt Use

Gloria Hale-Carlsson, MPH
(Injury Control Program)

Figure 5



- 64.8 percent of New Yorkers reported they always use safety belts.
- Females reported a higher percentage of safety belt use than males with the exception of the 45-54 and 65+ age groups. See Figure 5.
- The lowest percentage of safety belt use was among males in the 18-24 year age group (4.1%). See Figure 5.

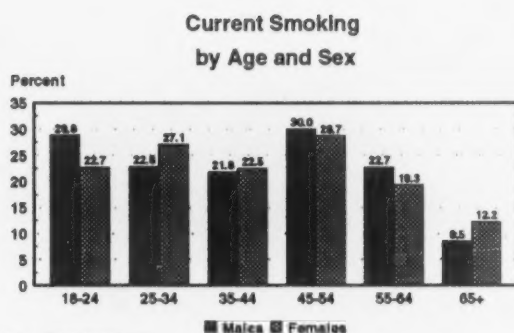
Note: Safety belt use is defined as always using safety belts while in an automobile.

Cigarette Smoking

Russell C. Sciandra, MA
(Bureau of Adult and Gerontological Health)

Behavioral
Risk
Factor
Surveillance
System

Figure 6



- Compared to whites, cigarette use was slightly more prevalent among blacks and slightly less prevalent among Hispanics. Smoking reported by other racial/ethnic groups was significantly lower. See Figure 7.

- 22.1 percent of New Yorkers reported they were current regular smokers, a decline of nearly a full percentage point from 1991.
- 53 percent of adults who ever smoked reported they became regular smokers before age 18.
- Peak smoking prevalence occurs in both sexes between ages 45 and 54. Cigarette use declines rapidly thereafter. See Figure 6.

Figure 7

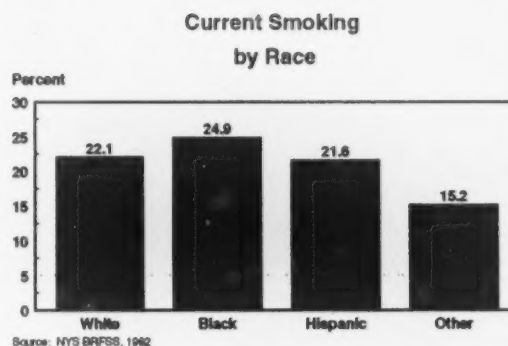
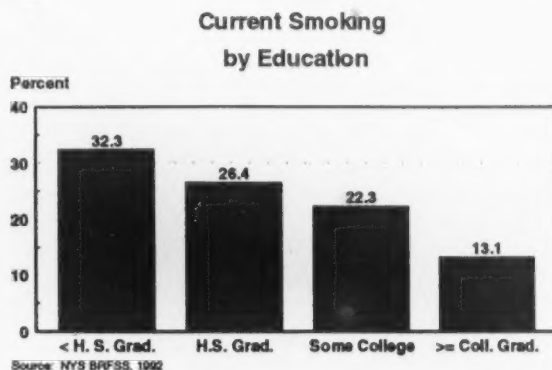


Figure 8



- Educational status was the best predictor of cigarette use. The smoking rate among college and technical school graduates was less than one-half that of those who did not graduate from high school. See Figure 8.

Note: Current regular smokers are defined as those respondents who have ever smoked 100 cigarettes and smoke regularly now.

Alcohol Use

Colleen McLaughlin, MPH
(Bureau of Cancer Epidemiology)

- 53 percent of New Yorkers reported that they had consumed alcohol in the past month (Figure 9), but 54 percent of current drinkers consumed less than 10 drinks per month.
- 13 percent of all New Yorkers and 26 percent of current drinkers reported acute (binge) drinking (Figure 10). 25 percent of current drinkers aged 18-24 reported binge drinking on 3 or more occasions in the past month.
- Men were more likely than women to report patterns of drinking consistent with alcohol abuse (Figures 10 and 11), and whites reported higher levels of alcohol abuse than non-whites.

Figure 9

Current Alcohol Use By Age and Sex

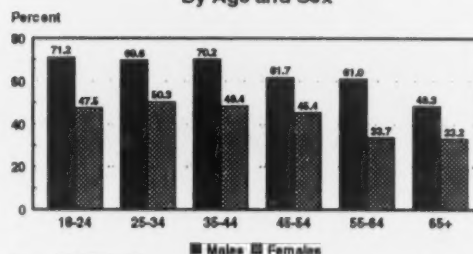


Figure 10

Acute Alcohol Use by Age and Sex

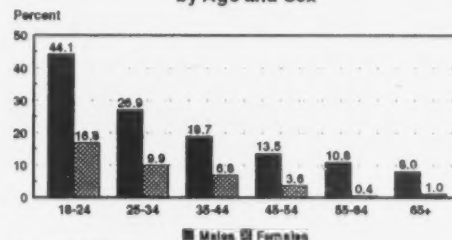
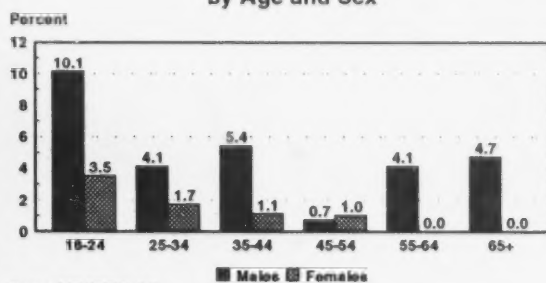


Figure 11

Chronic Alcohol Use by Age and Sex



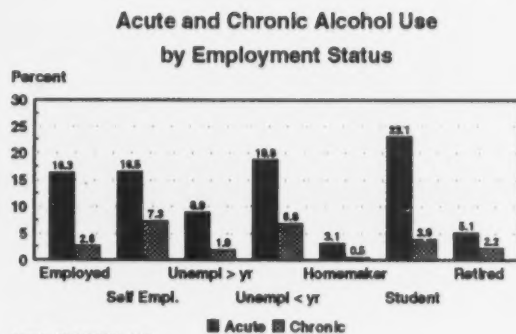
- 3 percent of all New Yorkers, and 6 percent of current drinkers, reported chronic drinking. See Figure 11.
- Alcohol consumption and alcohol abuse tended to decrease with age, although men over age 55 years reported higher chronic drinking rates than did men aged 45-55. See Figures 9, 10 and 11.

Note: Alcohol use is defined in 4 categories: current drinking, acute drinking, chronic drinking, and drinking and driving. **Current drinkers** includes respondents who report having had any alcoholic beverage in the past month.

Acute (binge) drinkers includes respondents who report having 5 percent or more drinks on an occasion, 1 or more times in the past month.

Alcohol Use (CONTINUED)

Figure 12



- Respondents who were self employed or out of work for less than one year reported the highest rates of chronic drinking, whereas students reported the highest rates of binge drinking. See Figure 12.

- 3 percent of current drinkers reported drinking and driving in the past month, and over half of these individuals reported more than one episode of drinking and driving in the past month.

Chronic drinkers are those respondents who report an average of 60 or more alcoholic drinks in the past month. The category **Drinking and driving** includes those who report having driven after having had perhaps too much to drink, one or more times in the past month.

Cholesterol Screening and Awareness

Thomas A. Melnik, DrPH
(Division of Nutrition)

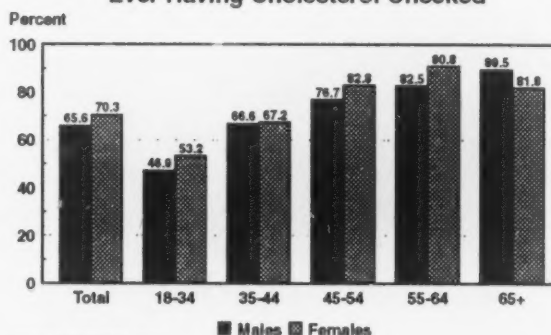
Figure 13

- The prevalence of adults ever having their cholesterol checked has more than doubled in New York State since 1987, increasing from 33 percent in that year to 68 percent in 1992. Those reporting ever having their cholesterol checked in 1992 had usually done so within the past five years.

- Ever having cholesterol checked was somewhat higher in females (70.3%) compared to males (65.6%). The prevalence of ever having cholesterol checked in 1992 also increased with age for both males and females, with the exception of women over 65 years of age. See Figure 14. Ever having cholesterol checked also increased with income and educational status. See Figure 13.

- White non-Hispanics (71.3%) had a higher prevalence of ever having their cholesterol checked compared to black non-Hispanics (61.4%) and Hispanics (63.8%). See Figure 14.

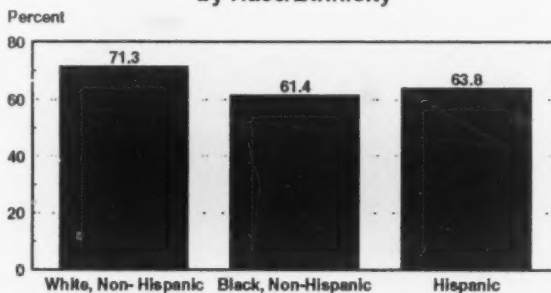
Ever Having Cholesterol Checked



Source: NYS BRFSS, 1992

Figure 14

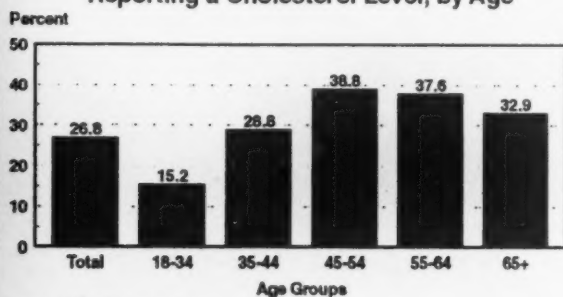
Ever Having Cholesterol Checked
by Race/Ethnicity



Source: NYS BRFSS, 1992

Figure 15

Ever Having Cholesterol Checked and
Reporting a Cholesterol Level, by Age



Source: NYS BRFSS, 1992

- Although many have had their cholesterol checked, only one in four (26.8%) were able to report their cholesterol level. Ability to report cholesterol level increased with age up to age 45-54 and then declined. See Figure 15. Males (26.7%) and females (26.8%) were equally able to report their cholesterol level.

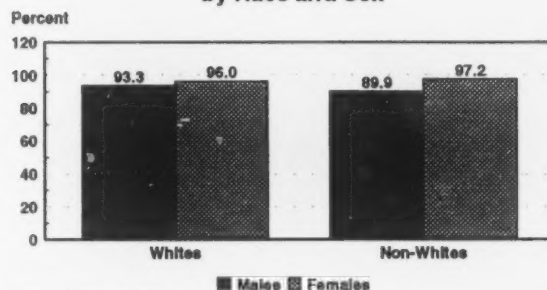
Hypertension Awareness

Christopher Maylahn, MPH
(Bureau of Adult and Gerontological Health)

- 95 percent of New Yorkers reported they have had their blood pressure checked in the past two years. The proportion was significantly higher among females regardless of race. See Figure 16.

Figure 16

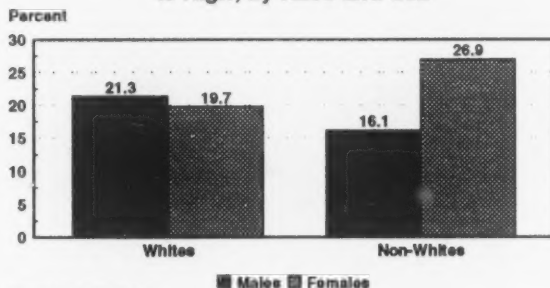
Had Blood Pressure Checked in Past Two Years by Race and Sex



Source: NYS BRFSS, 1992

Figure 17

Told by Health Professional Blood Pressure Is High, by Race and Sex

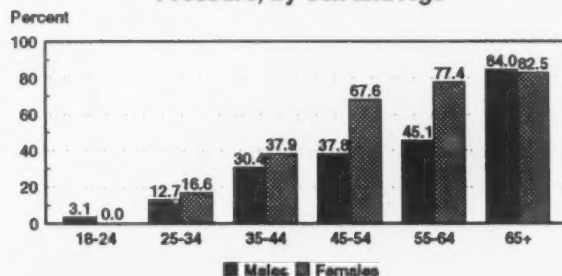


Source: NYS BRFSS, 1992

- One in five New Yorkers has been told by a health professional their blood pressure is high. Among females, the proportion told their blood pressure is high was significantly higher in non-whites. See figure 17.

Figure 18

Medicine Prescribed for High Blood Pressure, by Sex and Age



Denominator - have ever been told Blood Pressure
Source: NYS BRFSS, 1992

- 55 percent of New Yorkers ever told they have high blood pressure were currently on antihypertensive medication. Thus the proportion was consistently lower among males except in the 65 + age group. See Figure 18.
- The proportion of New Yorkers ever told they have high blood pressure was higher among those with less education, lower income, and/or recently unemployed.

Physical Activity

Colleen Baker

(Bureau of Adult and Gerontological Health)

- 33.1 percent of New Yorkers reported that they are physically inactive.
- Females were significantly more physically inactive (36.2%) than males (29.6%).
- Physical inactivity was significantly higher among non-whites (42.9%) than whites (29.5%).
- Males age 55-64 (69.8%) and females age 65+ (74.6%) were most likely to report sedentary lifestyles. See Figure 19.

Figure 19

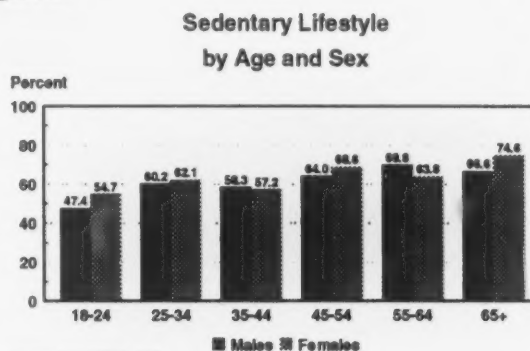


Table 1

Leisure-Time Physical Activities

	Percent
Walking	41.3
Aerobics Class	8.7
Bicycling	5.5
Running	5.3
Yard Work	5.3
Jogging	2.5
Calisthenics	2.0
Swimming	2.0
Home Exercise	1.8
Tennis	1.2
All Others	24.0

- The primary activity reported by persons who participate in any leisure-time physical activities was *walking* (41.3 %). See Table 1.

Note: *Physical inactivity* includes respondents who reported no leisure-time physical activities.

Sedentary lifestyle is defined as respondents reporting exercising less than 20 minutes/session, and/or less than 3 times/week of activity during the past month.

Overweight and Weight Control Practices

Deborah A. Spicer, RD, MPH
(Division of Nutrition)

- 24.7 percent of New Yorkers reported they were overweight. Males had a higher self-reported prevalence of overweight (26.2%) than females (23.3%). See Figures 20, 21 and 22.
- A higher proportion of black adults were overweight (33%) than were Hispanics (28%) or whites (24%).

Figure 20

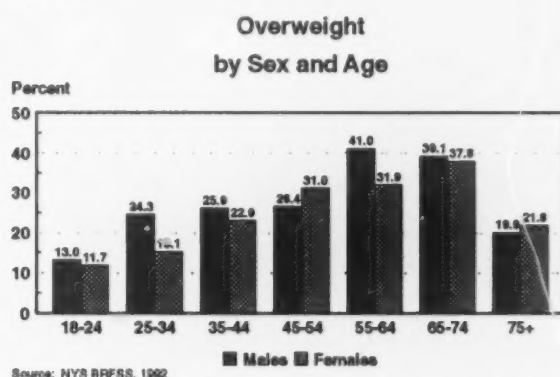


Figure 21

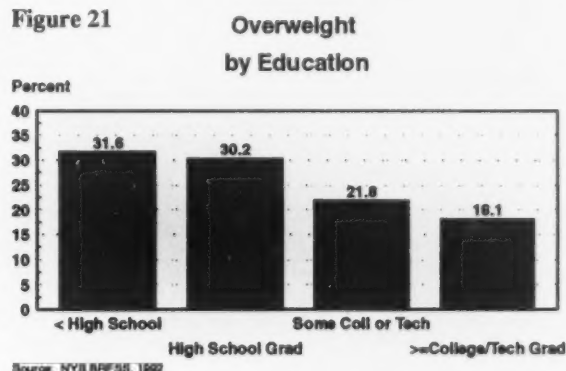
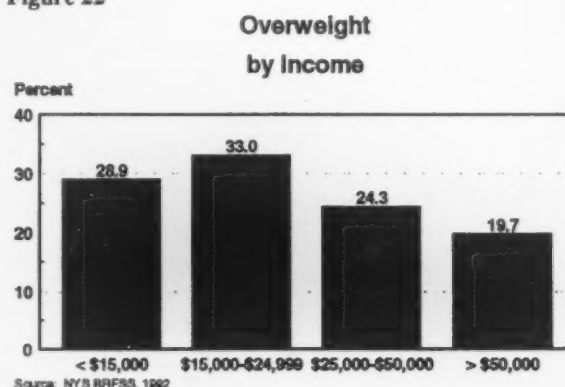


Figure 22



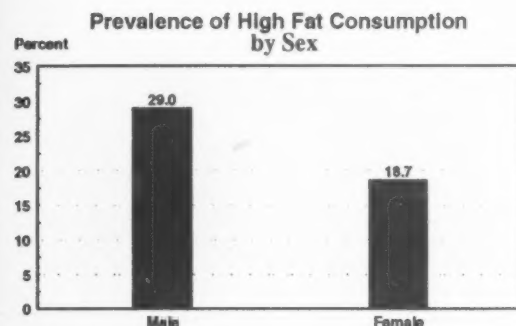
- 37 percent of adults reported they were trying to lose weight (while only 24.7 percent were overweight).
- Of those who were trying to lose weight, 77 percent were eating fewer calories, while only 51 percent were increasing physical activity.
- Males and females were equally likely to be increasing physical activity (49.4% vs 52.8%). People over 55 were much less likely to be increasing physical activity. Blacks (38.2%) were much less likely than whites (54.2%) or Hispanics (44.6%) to be increasing physical activity in an effort to lose weight.

Note: Based on self reported weight and height. **Overweight** is defined as females with a body mass index ≥ 27.3 and males with a body mass index ≥ 27.8 .

Dietary Fat Intake

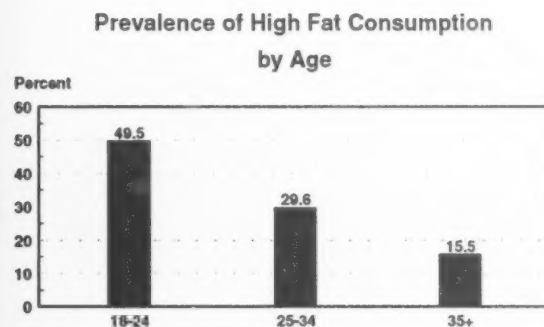
Thomas A. Melnik, DrPH
(Division of Nutrition)

Figure 23



Source: NYS BRFSS, 1992
Those above the 75th percentile in the state.

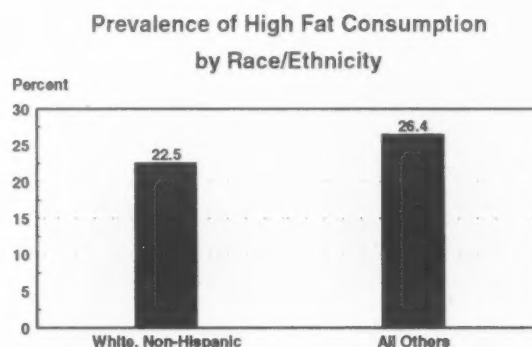
Figure 24



Those above the 75th percentile in the state
Source: NYS BRFSS, 1992

- Responses to an abbreviated food frequency questionnaire (13 foods and food groups) were used to develop an index of fat intake. Respondents were categorized into quartiles of fat intake based on the distribution of fat consumption for all respondents in the state. High fat consumption was defined as those above the 75th percentile for distribution of fat intake in the state.
- The findings indicate that the prevalence of high fat consumption decreases with age, is greater in males than females, and is less among white non-Hispanics compared to all other groups combined. See Figures 23, 24 and 25.

Figure 25



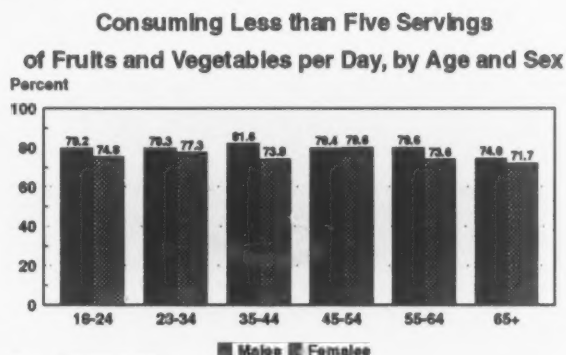
Source: NYS BRFSS, 1992
Those above the 75th percentile in the state.

Fruits and Vegetables

Deborah A. Spicer, RD, MPH
(Division of Nutrition)

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Figure 26



- Only 28.8 percent reported they ate less than 3 servings per day, while 44.6 percent ate 3-4 servings per day. For this group, reaching the goal of at least five servings a day will require only modest changes.
- A higher percentage of blacks did not meet the recommendations (81.2%) than whites (76.8%) or Hispanics (75.1%).
- Those with less education were more likely to not meet the recommendations, but low consumption does not appear to be restricted to those with lower income. See Figures 27 and 28.

- Only 23.2 percent of New Yorkers reported they eat at least 5 servings of fruits and vegetables per day. This means that 76.8 percent of the population is not meeting dietary recommendations set forth by the National Cancer Institute. More males failed to meet the recommendation than females (79.1% vs 74.8%). See Figure 26.

Figure 27

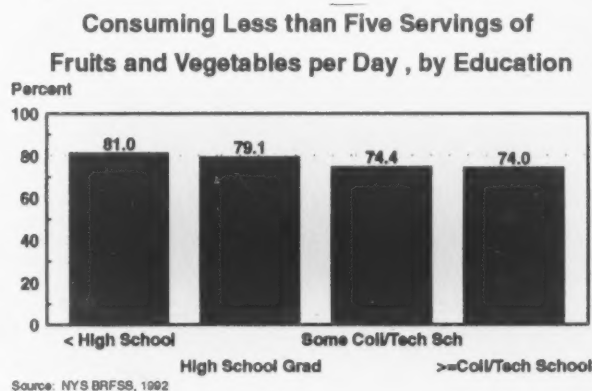
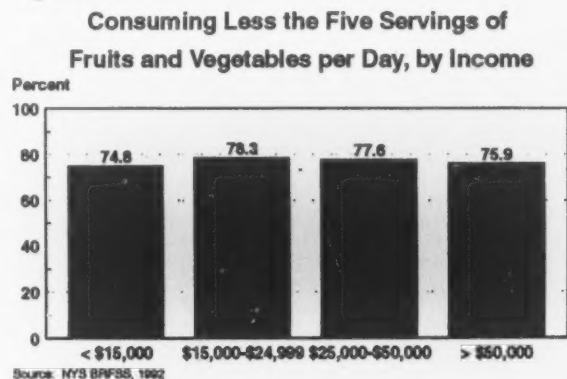


Figure 28



Pap Smear Screening

Aura Weinstein, MPH

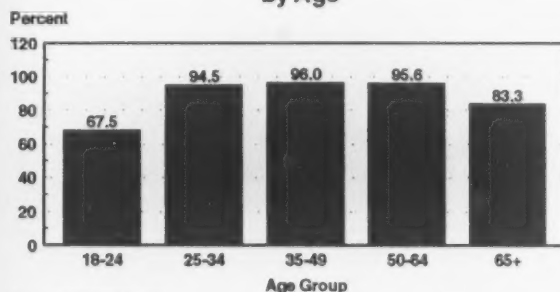
(Bureau of Cancer Epidemiology)

Patricia Lillquist, MSW

(Bureau of Cancer Epidemiology)

Figure 29

Ever Had a Pap Smear by Age



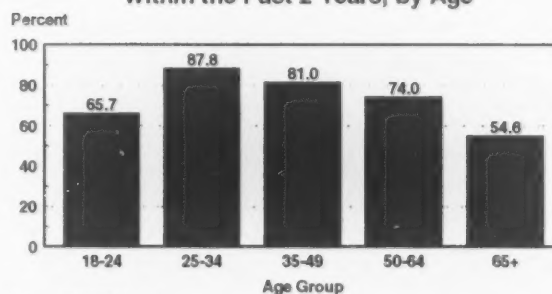
Source: NYS BRFSS, 1992

- Only 75 percent of women with intact uteri have had a Pap smear within the past two years.
- Pap smear testing within the past two years was lowest among the 18-24 and 65+ age groups, among women who were widowed, among women with incomes less than \$15,000, and among women with less than a high school education. See Figure 30.

- Of all women with intact uteri, 89 percent have reported they had a Pap smear.
- The proportion of women having had a Pap smear was lower among the youngest (18-24) and oldest (65+) age groups, among those who had never been married, and among those with incomes less than \$15,000. See Figure 29.

Figure 30

Ever Had a Pap Smear Within the Past 2 Years, by Age



Source: NYS BRFSS, 1992

Mammography Use

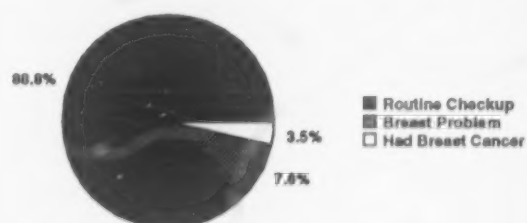
Susan True
(Cancer Services Program)
Patricia Lillquist, MSW
(Bureau of Cancer Epidemiology)

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- 76 percent of women age 40 and over reported having ever had a mammogram.
- Only 71 percent of women age 40 and older reported having ever had a mammogram AND a breast exam.
- 89 percent of women having mammograms reported they were done as part of a routine checkup. See Figure 31.

Figure 31

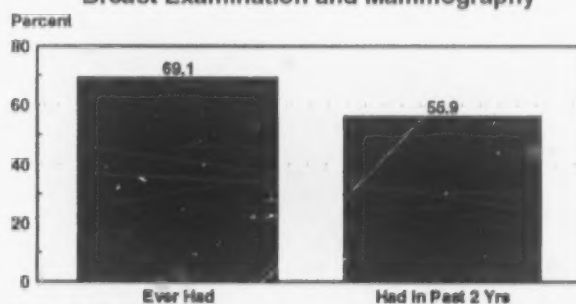
Reason for Having Most Recent Mammogram Among Woman Age 50 and Over Who Ever Had Mammography



SOURCE: NYS BRFSS, 1992

Figure 32

Women age 50 and Over Reporting a Clinical Breast Examination and Mammography



SOURCE: NYS BRFSS, 1992

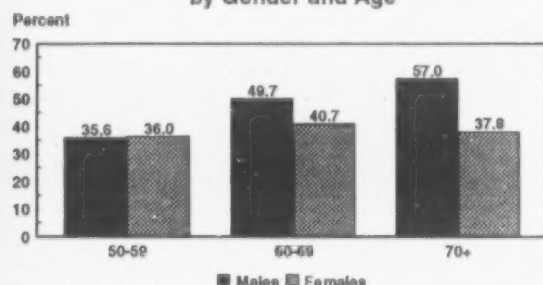
- While 69.1 percent of women age 50 and older had ever received a mammogram and clinical breast exam, only 55.9 percent had received them within the past two years. See Figure 32.

Colorectal Cancer Screening

Patricia Lillquist, MSW
(Bureau of Cancer Epidemiology)

Figure 33

**Blood Stool Testing
by Gender and Age**

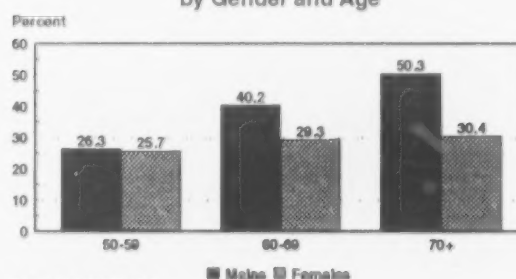


Source: NYS BRFSS, 1992

- Approximately 33 percent of New Yorkers age 40 and older have had a digital rectal exam.
- Approximately 42 percent of those age 50 and older have had a blood stool test.
- Blood stool testing increased with age for men but not for women, although the differences were not statistically significant. See Figure 33.
- Those age 50 and older with incomes of \$35,000 and higher were more likely to have had blood stool testing, (57.7 %) than those with incomes under \$35,000 (37.7%).

Figure 34

**Use of Proctoscopy
by Gender and Age**



Source: NYS BRFSS, 1992

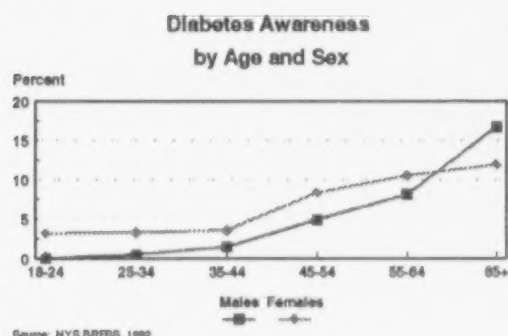
- Approximately 33 percent of New York State residents age 50 and older have had proctoscopy.
- Use of proctoscopy increased with age for men but not for women, although the differences were not statistically significant. See Figure 34.

Diabetes

Kathryn Godley, MSN
(Bureau of Adult and Gerontological Health)

Behavioral
Risk
Factor
Surveillance
System

Figure 35



- Those with less than a high school education (11.0%) were more likely to have been told they have diabetes than those who continued their education. See Figure 36.

- 5.6 percent of respondents have ever been told by a doctor they have diabetes.
- Females age 65+ were more likely to report they were told by a doctor they have diabetes (6.7% vs 4.4%). See Figure 35.

Figure 36

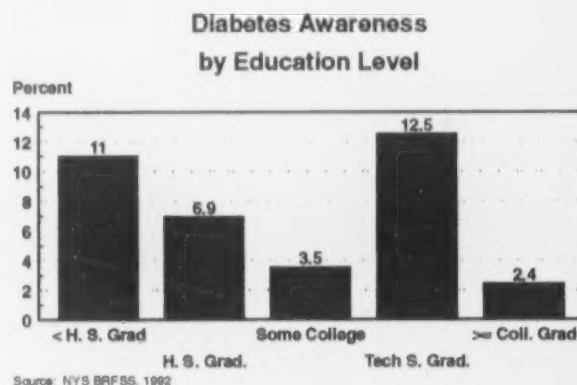
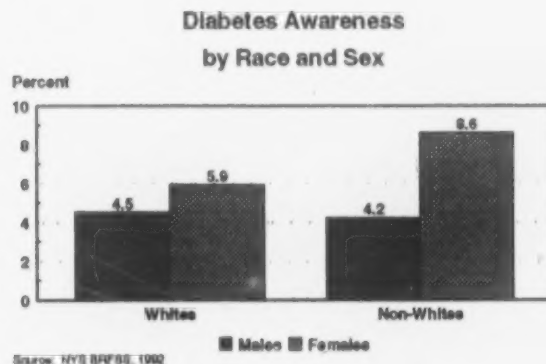


Figure 37



- Non-white male respondents were less likely than white male respondents to have been told by a doctor they have diabetes, while non-white female respondents were more likely than white female respondents to have been told. See Figure 37.

Violence

Gloria Hale-Carlsson, MPH
(Injury Control Program)

Figure 38

- 4.7 percent of New Yorkers reported they or a member of their family have been a victim of violent or abusive behavior, like assault, during the last 12 months.
- Households with the highest percentages of reported assaults were those with income levels between \$20,000 - \$34,999 a year. See Figure 38.

